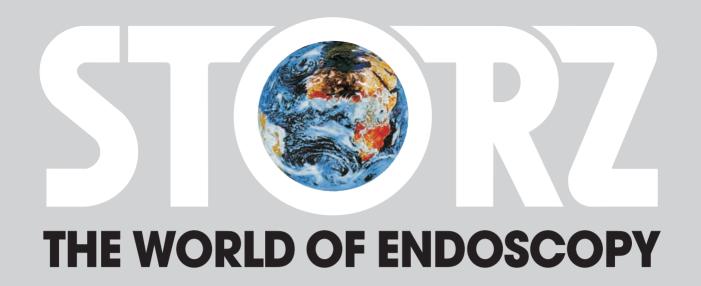


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PLASTIC SURGERY

5th EDITION 2/2012 US

Important information for U.S. customers

Note:

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

Important Notes:

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

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

Standardized Design and Labeling

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

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

Original or Counterfeit

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

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



KARL STORZ Items Not Available in the U.S. November, 2012

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

Order no.	Description	Section	Page
28051 M	Rollable Cuff	CTS 16 B	250
28272 EH	ENDOCRANE®	HT 4	256
		VITOM 15	279
		PL-SUR-SP 58	SP 62
20 3210 08	DUOMAT®	AE-S-UNITS 6 B	U 8
		PL-SUR-SP 61	SP 65

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 DRICES

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 quarantee 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, perform minor 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 groundling specifications provided by KSEA and, (2) any special, incidental, consequential, punitive, exemplary or indirect damages, including but not limited to alleged damages for delayed shipment, non-delivery, product failure, product design or production, inability to use such products or services, loss of future business (lost profits), or from any other cause, whatsoever, in connection with or arising from the purchase, sale, lease, rental, installation or use of KARL STORZ products, even if KSEA has been advised of the possibility of such damages. SOME JURISDICTIONS DO NOT ALLOW EXCLUSIONS AND DISCLAIMERS OF CERTAIN WARRANTIES OR LIMITATIONS OF LIABILITY, SO THE LIMITATIONS AND/OR EXCLUSIONS, SET FORTH IN THESE TERMS AND CONDITIONS, MAY NOT APPLY. IN THAT EVENT, KSEA'S LIABILITY WILL BE LIMITED TO THE GREATEST EXTENT PERMITTED BY LAW IN THE SUBJECT JURISDICTION.

12. DISCOUNTS AND REBATES

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

13. SOFTWARE OWNERSHIP AND LICENSING

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



BASIC SETS







Set recommended by DELMAR, M.D.

Set ı	recommende	d by DELMAR, M.D.
1	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°
2	50200 EL	Sheath, with rotating stopcock, with distal beak 11 mm, for restraining tissue, for use with HOPKINS® II telescopes 30°
3	50410 FB	TAKE-APART® Raspatory, malleable, spoon-shaped spatula, slightly curved, width 12 mm, working length 15 cm, color code: red-yellow
4	50410 CB	TAKE-APART® Raspatory, malleable, spatula 12 x 12 mm, working length 15 cm, color code: red-yellow
(5)	50410 EB	TAKE-APART® Raspatory, malleable, spatula slightly curved, width 8 mm, length 15 cm
6	50411 C	TAKE-APART® Elevator, straight, spatula 12 x 12 mm, length 15 cm
7	50411 A	TAKE-APART® Elevator, straight, width 9 mm, working length 15 cm, color code: black
8	50410 AB	TAKE-APART® Raspatory, malleable, width 9 mm, working length 15 cm, color code: red-yellow
9	50411 BG	TAKE-APART® Elevator, curved, width 6 mm, working length 15 cm
10	50312 AG	TAKE-APART® Nerve Hook, curved, hook angled to left, working length 15 cm, color code: black-yellow
11)	50312 BG	Same, hook curved to right
12	50230 F	CLICK'line Dissecting and Grasping Forceps, dismantling, non-rotating, with 4 locking positions, single action jaws, straight sheath, size 3 mm, length 18 cm
13)	50244 GW	CLICK'line Dissecting and Grasping Forceps, dismantling, non-rotating, with 4 locking positions, double action jaws, robust, horizontal opening, curved sheath, size 5 mm, length 18 cm
14)	50231 GW	CLICK'line Scissors, dismantling, non-rotating, with 4 locking positions, double action jaws, curved, horizontal opening, curved sheath, size 3 mm, length 18 cm
15)	50239 G	CLICK'line Scissors, dismantling, non-rotating, with 4 locking positions, double action jaws, curved, serrated, straight sheath, size 5 mm, length 18 cm
16	50203 DR	Coagulation Suction Tube, L-shaped, hook curved to right, curved sheath, diameter 5 mm, working length 15 cm
	30804	Handle with Trumpet Valve, for suction or irrigation, autoclavable, for use with 5 mm coagulating suction tubes and 5 mm suction and irrigation tubes

10-11

REC-SET-PL 3 B

Endoscopic Plastic Surgery, Mammaplasty





Endoscopic Plastic Surgery, Mammaplasty



Set recommended by DELMAR, M.D.

1	50251 MR	Retractor, for creation of an operation pocket, with handle for single hand use, width of spatula 30 mm, length 14 cm, with two lateral suction channels for smoke evacuation
2	50250 AA	HOPKINS® II Straight Forward Telescope 0°, enlarged view, diameter 10 mm, length 31 cm, autoclavable , fiber optic light transmission incorporated, color code: green
	50251 M	DELMAR Unipolar Endo-Dissector, size 20 mm, working length 28 cm, with connector pin for unipolar coagulation
	50251 ML	DELMAR Unipolar Coagulating Electrode, package of 5, for use with Unipolar Endo-Dissector 50251 M
3	50251 DE	ECKERT Breast Dissector, blunt, curved, size 10 mm, length 23 cm
4	33221 MD	CLICKtine KELLY Dissecting and Grasping Forceps, rotating, dismantling, insulated, with connector pin for unipolar coagulation, double action jaws, size 5 mm, length 30 cm
(5)	50251 R	Retractor, with fiber optic light carrier, with teeth, with suction channel for smoke evacuation, width of spatula 30 mm, length 9 cm

Endoscopic Plastic Surgery, Harvesting of the Latissimus Dorsi Muscle





12

Endoscopic Plastic Surgery, Harvesting of the Latissimus Dorsi Muscle



Set recommended by FINE, M.D.

1	50253 BA	HOPKINS® II Forward-Oblique Telescope 30°, enlarged view, diameter 10 mm, length 31 cm, autoclavable, fiber optic light transmission incorporated, color code: red
	50251 LG	Optical Retractor, width of spatula 25 mm, with 2 individually adjustable lateral suction channels for smoke evacuation, for use with HOPKINS® II Telescope 50253 BA
2	50520 MK	METZENBAUM Scissors, curved, length 28 cm
3	50520 MG	Same, length 40 cm
4	50520 PG	Bipolar Coagulaton Forceps, insulated, bayonet-shaped, angled tip, blunt, tip 2 mm, length 25 cm
	50520 PK	Same, tip 1 mm, length 19 cm (not illustrated)
(5)	50525 SP	CLICK'line FINE Scissors, robust jaws, angled, single action jaws, straight sheath, with connector pin for unipolar coagulation, size 5 mm, length 30 cm
6	50521 FP	RoBi® FINE Grasping Forceps, with connector pin for bipolar coagulation, double action jaws, jaws angled upwards, curved sheath, size 5 mm, length 30 cm
7	50521 GP	Same, jaws angled downwards
8	50520 D	Dissector, with spatula, blunt, curved sheath, diameter 5 mm, working length 30 cm
	50520 DK	Same, working length 17 cm (not illustrated)

12

REC-SET-PL 7 B 7







Set recommended	h., ODÖNED	MD
Set recommended	hv (3RONER	N/III

Set i	ecommende	d by Ghonen, M.D.
1	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 EK	Telescope Sheath, with rotating stopcock, with distal beak 5 mm, for restraining tissue, for use with HOPKINS® II telescopes 30°
2	50200 EM	Sheath, with rotating stopcock, with distal beak 8 mm, for restraining tissue, for use with HOPKINS® II telescopes 30°
3	50410 CB	TAKE-APART® Raspatory, malleable, spatula 12 x 12 mm, working length 15 cm, color code: red-yellow
4	50410 FB	TAKE-APART® Raspatory, malleable, spoon-shaped spatula, slightly curved, width 12 mm, working length 15 cm, color code: red-yellow
(5)	50312 AG	TAKE-APART® Nerve Hook, curved, hook angled to left, working length 15 cm
6	50312 BG	Same, hook angled to right
7	50244 GW	CLICK'line Dissecting and Grasping Forceps, dismantling, non-rotating, with 4 locking positions, double action jaws, robust, horizontal opening, curved sheath, size 5 mm, length 18 cm
8	50243 G	CLICK'line Scissors, dismantling, non-rotating, with 4 locking positions, double action jaws, curved, serrated, straight sheath, size 5 mm, length 18 cm
9	50203 DR	Coagulation Suction Tube, L-shaped, hook curved to right, curved sheath, diameter 5 mm, working length 15 cm
	30804	Handle with Trumpet Valve, for suction or irrigation, autoclavable, for use with 5 mm coagulating suction tubes and 5 mm suction and irrigation tubes

Endoscopic Plastic Surgery, Mammaplasty





Endoscopic Plastic Surgery, Mammaplasty



Set recommended by GRÖNER, M.D.

1	50251 BA	HOPKINS® II Forward-Oblique Telescope 30°, enlarged view, diameter 5 mm, length 24 cm, autoclavable , fiber optic light transmission incorporated, color code: red
	50251 LC	Optical Retractor, for creation of an operation pocket, with handle for single-hand use, for use with HOPKINS® II Telescope 50251 BA
2	50251 DE	ECKERT Breast Dissector, blunt, curved, size 10 mm, length 23 cm
3	50251 T	Coagulation Suction Tube, spatula-shaped, blunt, straight, size 5 mm, length 30 cm
	30804	Handle with Trumpet Valve, for suction or irrigation, autoclavable, for use with 5 mm coagulating suction tubes and 5 mm suction and irrigation tubes

12-11

REC-SET-PL 11 C







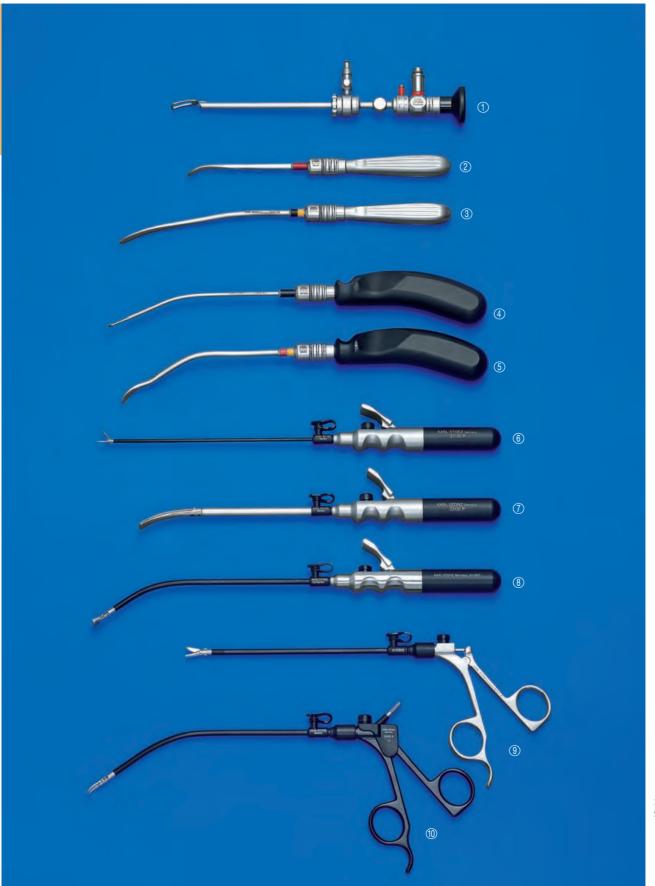
Set recommended by Prof. HÖNIG, M.D.

OCT I	Coommichae	a by Froi. Froiting, W.D.
1	50200 L	Optical Retractor, with handle, width of distal end 8 mm, with fixation screw for control of penetration depth of endoscope, with Telescope Sheath 50200 LS, for use with HOPKINS® II telescopes diameter 4 mm, length 18 cm
2	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
3	58210 AGA	Raspatory, curved, width 9 mm, working length 15 cm
4	58210 GGA	Raspatory, curved, arc-shaped spatula, width 9 mm, working length 15 cm
5	58210 LGA	Raspatory, curved, for lifting and dissecting the orbita rim periosteum, distal end of spatula 90° curved upwards, upper part sharp, width 9 mm, working length 15 cm
6	50200 DS	V-Tunnel Drill System, with handle, with three teeth for secure fixation on the cranium, with rotating drill guide, for use with Drills 50200 DB/DK
7	50200 DB	Drill, with penetration stop, diameter 2.1 mm, length 7.5 cm, for use with V-Tunnel Drill System 50200 DS
8	50200 DK	Same, diameter 1.3 mm
9	50203 BH	TAKE-APART® Bipolar Forceps, with connector pin for bipolar coagulation, with irrigation connector, with fine jaws, width 1.5 mm, size 5 mm, length 15 cm
10	50241 OS	CLICK'line Dissector, single action jaws, curved jaws, with 4 locking positions, triangular-shaped, blunt, with straight sheath, width of spatula 12 mm, size 7 mm, length 14 cm
11)	50239 GW	CLICK'line Scissors , dismantling, non-rotating, with 4 locking positions, double action jaws, serrated, curved, horizontal opening, curved sheath, size 5 mm, length 18 cm
12	50173 AM	Suture Passer, for endoscopic forehead-lifting, size 2.8 mm, length 17 cm

10-11

REC-SET-PL 13 C







Set recommended by KRAUSE-BERGMANN, M.D.

Set	Set recommended by KRAUSE-BERGMANN, M.D.		
1	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°	
2	50310 SK	TAKE-APART® Raspatory, straight, spatula slightly curved upwards, width 8 mm, working length 10 cm, color code: red	
3	50310 AB	TAKE-APART® Raspatory, malleable, width 9 mm, working length 15 cm, color code: red-yellow	
4	50412 AG	TAKE-APART® Nerve Hook, curved, hook curved to left, working length 15 cm, color code: black-yellow	
5	50410 FB	TAKE-APART® Raspatory, malleable, spoon-shaped spatula, slightly curved, width 12 mm, working length 15 cm, color code: red-yellow	
6	50230 F	CLICK'line Dissecting and Grasping Forceps, dismantling, non-rotating, with 4 locking positions, single action jaws, straight sheath, size 3 mm, length 18 cm	
7	50241 OS	CLICK'line Dissector, dismantling, non-rotating, single action jaws, curved jaws, with 4 locking positions, triangular-shaped, blunt, with straight sheath, width of spatula 12 mm, size 7 mm, length 14 cm	
8	50244 GW	CLICK'line Dissecting and Grasping Forceps, dismantling, non-rotating, with 4 locking positions, double action jaws, robust, horizontal opening, curved sheath, size 5 mm, length 18 cm	
9	50239 G	CLICK'line Scissors, dismantling, non-rotating, with 4 locking positions, double action jaws, curved, serrated, straight sheath, size 5 mm, length 18 cm	
10	50245 GW	CLICK'line Scissors, dismantling, non-rotating, with 4 locking positions, double action jaws, serrated, curved, horizontal opening, curved sheath, size 5 mm, length 18 cm	

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Endoscopic Plastic Surgery, Mammaplasty and Abdominoplasty





Endoscopic Plastic Surgery, Mammaplasty and Abdominoplasty



Set recommended by KRAUSE-BERGMANN, M.D.

Set i	recommenaed	d by Krause-Bergmann, M.D.
1	50251 LD	Optical Retractor, for creation of an operation pocket, with 2 separate suction channels for smoke evacuation, with handle for single hand use, for use with HOPKINS® II Telescope 50251 BA
	50251 BA	HOPKINS® II Forward-Oblique Telescope 30°, enlarged view, diameter 5 mm, length 24 cm, autoclavable, fiber optic light transmission incorporated, color code: red
2	50251 DF	ECKERT Breast Dissector, blunt, hook-shaped curve, size 10 mm, length 23 cm
3	50251 DE	Same, curved
4	50525 SP	CLICK'line FINE Scissors, robust jaws, angled, single action jaws, straight sheath, with connector pin for unipolar coagulation, size 5 mm, length 30 cm
5	33225 ML	CLICK'line KELLY Dissecting and Grasping Forceps, rotating, dismantling, insulated, with connector pin for unipolar coagulation, LUER-Lock connector for cleaning, double action jaws, long, size 5 mm, length 30 cm
6	34225 MS	CLICK'line METZENBAUM Scissors, rotating, dismantling, with connector pin for unipolar coagulation, with LUER-Lock connector for cleaning, double action jaws, length of blades 15 mm, curved, size 5 mm, length 30 cm
7	50251 T	Coagulation Suction Tube, spatula-shaped, blunt, straight, size 5 mm, length 30 cm
	30804	Handle with Trumpet Valve, for suction or irrigation, autoclavable, for use with 5 mm coagulating suction tubes and 5 mm suction and irrigation tubes
8	33532 PR	CLICK'line Dissecting and Grasping Forceps, rotating, dismantling, without connector pin for unipolar coagulation, double action jaws, atraumatic, length of jaws 40 mm, for grasping organs, size 10 mm, length 36 cm
9	26173 KAL	KOH Macro Needle Holder, with tungsten carbide insert, ergonomic straight handle with disengageable ratchet, ratchet position right, jaws curved to 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
10	26173 KAR	KOH Macro Needle Holder, with tungsten carbide insert, ergonomic straight handle with disengageable ratchet, ratchet position left, jaws curved to right, 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

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Endoscopic Plastic Surgery, Nerve, Muscle and Fascia Lata Harvest





Endoscopic Plastic Surgery, Nerve, Muscle and Fascia Lata Harvest



Set	recommende	d by KRAUSE-BERGMANN, M.D.
1	50251 LD	Optical Retractor, for creation of an operation pocket, with 2 separate suction channels for smoke evacuation, with handle for single hand use, for use with HOPKINS® II Telescope 50251 BA
	50251 BA	HOPKINS® II Forward-Oblique Telescope 30°, enlarged view, diameter 5 mm, length 24 cm, autoclavable , fiber optic light transmission incorporated, color code: red
2	50251 LG	Optical Retractor, width of spatula 25 mm, with 2 individually adjustable lateral suction channels for smoke evacuation, for use with HOPKINS® II Telescope 50253 BA
	50253 BA	HOPKINS® II Forward-Oblique Telescope 30°, enlarged view, diameter 10 mm, length 31 cm, autoclavable , fiber optic light transmission incorporated, color code: red
3	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
4	28400 E	Fascial Knife, retrograde cutting, for endoscopic paratibial fasciotomy, working length 42 cm, for use with HOPKINS® Telescope 28400 AA
(5)	28405 FP	Fascial Knife, antegrade cutting, distal end 90° angled, working length 31 cm, for use with Optical Retractors 50251 LC/LD/LH/LG
6	33422 MA	CLICK'line MANHES Grasping Forceps , "cobra jaws", rotating, dismantling, insulated, with connector pin for unipolar coagulation, single action jaws, 1 x 2 teeth, size 5 mm, length 43 cm
7	33422 KJ	CLICK'line REDDICK-OLSEN Dissecting and Grasping Forceps, rotating, dismantling, insulated, with connector pin for unipolar coagulation, double action jaws, size 5 mm, length 43 cm
8	33222 KJ	Same, length 30 cm
9	34221 MS	CLICK'line METZENBAUM Scissors, rotating, dismantling, insulated, with connector pin for unipolar coagulation, double action jaws, curved, size 5 mm, length 30 cm
10	33221 MD	CLICK'line KELLY Dissecting and Grasping Forceps, rotating, dismantling, insulated, with connector pin for unipolar coagulation, double action jaws, size 5 mm, length 30 cm
11)	34221 MA	CLICK'line METZENBAUM Scissors , rotating, dismantling, insulated, with connector pin for unipolar coagulation, double action jaws, spoon-shaped blades, serrated, curved, size 5 mm, length 30 cm
12)	38221 KL	RoBi® Grasping Forceps, CLERMONT-FERRAND model, rotating, dismantling, with connector pin for bipolar coagulation, single action jaws, flat jaws, for dissection, grasping, and bipolar coagulation, size 5 mm, length 30 cm
13	34421 EH	CLICK'line Hook Scissors, rotating, dismantling, insulated, with connector pin for unipolar coagulation, single action jaws, size 5 mm, length 43 cm
14)	50251 TC	Coagulation Suction Tube, spatula-shaped, blunt, curved downwards, spatula turned right by 90°, size 5 mm, length 30 cm
	30804	Handle with Trumpet Valve
15)	50251 T 30804	Coagulation Suction Tube, spatula-shaped, blunt, straight, size 5 mm, length 30 cm Handle with Trumpet Valve

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STORY - FNDOSKOPE



Auricle Reconstruction NEW



Set recommended by FIRMIN, M.D.

1	50209 FD	Dissector, sharp, curved, distal width 12 mm
2	50209 FK	Sharp Gouge, size 5 mm
3	50209 FH	Sharp Gouge, size 3.5 mm
4	50209 FB	Curette, oblong, small, distal angle
(5)	50209 FC	Curette, hook-shaped, sharp, distal angle
6	50209 FE	Dissector, distal width 8 mm
7	50209 FA	Surgical Handle, no. 3
(8)	50209 FL	Retractor for Removal of Cartilage, fiber optic light transmission incorporated

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Instrument Set for Septo-Rhinoplasty





Instrument Set for Septo-Rhinoplasty

1	488002	COTTLE Nasal Speculum , extra slender, without set screw, special matt finish, blade length 35 mm, length 13 cm
2	488003	Same, blade length 55 mm
3	488004	Same, blade length 75 mm
4	488018	KILLIAN-CLAUS Septum Chisel, with V-shaped cutting edge, special matt finish, width 5 mm, length 16.5 cm
5	488010	RUBIN Osteotome , flat, straight, double-edged grinding, rounded corners, with finger grip for controlled osteotome guidance, special matt finish, width 10 mm, length 16.5 cm
6	488012	Same, width 12 mm
7	488014	Same, width 14 mm
8	488022	Chisel, with finger button, flat, special matt finish, width 2 mm, length 18 cm
9	488023	Same, width 3 mm
10	488024	Same, width 4 mm
11)	488030	Marking Instrument, for nasal tip, with ball and half cup, straight, special matt finish, length 11 cu
12	488032	HEYMANN Nasal Scissors, medium size, special matt finish, working length 9.5 cm
13)	488034	CRAIG Septum Forceps, straight, special matt finish, working length 9 cm
14)	488041	BLAKESLEY Nasal Forceps, slender, straight, special matt finish, size 1, working length 11 cm
15)	488038	RUBIN Septum Morcelizer, with double joint, straight, special matt finish, length 20 cm
16)	488036	BECKER-CAPLAN Septum Scissors , with double joint, serrated, slender, special matt finish, working length 9.5 cm
17)	488044	JANSEN Nasal Dressing Forceps, bayonet-shaped, slender, special matt finish, length 16 cm
18)	488045	ADSON-BROWN Forceps, micro-model, atraumatic, fine side grasping teeth, special matt finish, length 12 cm
19	488046	ADSON Tissue Forceps, atraumatic, fine side grasping teeth, special matt finish, length 15 cm
20	488047	ADSON Tissue Forceps, 1 x 2 teeth, special matt finish, length 12 cm
21)	488049	KILNER Scissors , curved, with tungsten carbide inserts, flat end, sharp/sharp, extra delicate, special matt finish, length 13.5 cm
22	488050	KILNER Scissors, curved, flat end, blunt/blunt, special matt finish, length 15.5 cm
23)	488054	AUFRICHT Nasal Retractor, with side protector, special matt finish, length 16.5 cm
24)	488060	Ala Double Hook, with octagonal handle, with 2 sharp points, strongly curved, special matt finish width 2 mm, length 16.5 cm
25)	488056	KILNER Ala Retractor, two sharp points with button, special matt finish, width 10 mm, length 8.5 cm
26	488058	Same, width 13 mm
27)	488084	FERGUSON Suction Tube, with cut-off hole and stylet, LUER, special matt finish, outer diameter 8 Fr./ 2.5 mm, working length 11 cm
28	488085	Same, outer diameter 10 Fr.
29	488086	Same, outer diameter 12 Fr.
30	488065	BERGHAUS Ala Guiding Set
31)	488070	JOSEPH Raspatory, slightly curved, special matt finish, width 4 mm, length 17.5 cm
32)	488071	Same, strongly curved, width 3.4 mm
33	488090	Scalpel Handle, No. 3, special matt finish, length 12.5 cm
34)	488074	FREER Elevator , double-ended, sharp and blunt, special matt finish, length 20 cm
35)	488078	Nasal Rasp, double-ended, coarse, special matt finish, length 21.5 cm
36	488076	AUFRICHT Glabella Rasp, double-ended, backward cutting, length 20.5 cm
37)	488080	RYDER Needle Holder, tungsten carbide inserts, extra delicate and flat, special matt finish, length 18 cm
38)	439300	BERGHAUS Metal Nasal Mirror
	174200	COTTLE Metal Mallet, length 18 cm (not illustrated)
	231000	Hone, "ARKANSAS" oil stone, wedge-shaped, size 10 x 4 cm (not illustrated)

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Nerve Compression Syndrome, Endoscopic Treatment of the Sulcus Ulnaris Syndrome





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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
- 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
- COTTLE Speculum, with fiber optic light carrier, without set screw, special matt finish, blade length 55 mm, length 13 cm
- ® DUPLAY Dressing and Sponge Holding Forceps, curved, with ratchet, length 21 cm
- DUPLAY Dressing and Sponge Holding Forceps, straight, with ratchet, length 21 cm
- 10 METZENBAUM Scissors, curved, length 28 cm
- 1 METZENBAUM Scissors, curved, length 23 cm
- 12 METZENBAUM Scissors, curved, length 18 cm

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Endoscopic Treatment of the Nerve Compression Syndrome





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 lens irrigation system CLEARVISION® II

Irrigation Sheath 0°, for 28163 RKB/RKS, for use with HOPKINS® telescopes diameter 4 mm and 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 Sheath 28163 RSA/RSB and HOPKINS® telescopes diameter 4 mm (not illustrated)

- 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
- ADSON Artery Forceps, curved 90°, slender, length 18 cm
- (1) OCHSNER-KOCHER Artery Forceps, curved, 1 x 2 teeth, length 14 cm
- (f) **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
- 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
- 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
- 4 2x ADSON Tissue Forceps, 1 x 2 teeth, length 12 cm
- (5) 2x "ATRAUMA" Non-traumatic Tissue Forceps, length 16 cm

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12

Hand Arthroscopy N€W



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- 12	asi	C :	0

Du	310 001	
1	28300 BA	HOPKINS® II Wide Angle Forward-Oblique Telescope 30°, diameter 2.4 mm, length 10 cm, autoclavable, fiber optic light transmission incorporated, color code: red
	28303 DR	Arthroscope Sheath, with standard coupling mechanism, diameter 3.5 mm, working length 6.5 cm, two stopcocks, rotatable, for use with HOPKINS® II telescopes 30° 28300 BA
2	28302 BV	Obturator, blunt, for use with Arthroscope Sheaths 28303 BH/CH/DR/DS/BS/CS/CR/R
3	28728 CF	Micro-fracture Chisel, straight, working length 9 cm
4	28728 CG	Micro-fracture Chisel, angled 30°, working length 9 cm
(5)	28728 CH	Same, angled 70°
6	28183 ML	ARTHROFORCE® III TAKE-APART® Punch, through-cutting, angled, 45°, left, cutting width 1 mm, sheath diameter 2.3 mm, working length 10 cm
7	28183 B	ARTHROFORCE® III TAKE-APART® Punch, through-cutting, straight, cutting width 1 mm, sheath diameter 2.3 mm, working length 10 cm
8	28183 MB	ARTHROFORCE ® III TAKE-APART® Punch, through-cutting, angled, 15° upwards, cutting width 1 mm, sheath diameter 2.3 mm, working length 10 cm

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Plastic Surgery



Recommended Units and Accessories



22 2010 20-110	IMAGE 1 HUB $^{\text{TM}}$ HD Camera Control Unit SCB, with ICM module
22 2200 55-3	IMAGE1 H3-Z Three-Chip HD Camera Head
9524 NB	24" HD WIDEVIEW Monitor, wall mounting
20 1340 01	Cold Light Fountain XENON NOVA® 300, power supply 100 – 125/220 – 240 VAC, 50/60 Hz
20 1330 28	XENON Spare Lamp, 300 W, 15 V
20 5352 01U111	AUTOCON® II 400 SCB, Standard, power supply 230 VAC, 50/60 Hz
20 0133 30	Two-Pedal Footswitch, for controlling the coagulation and cutting function
27806	Neutral Electrode Connecting Cable
27805	Neutral Electrode, of conductive silicone with 2 rubber ties for fastening, contact surface A = 500 cm², for use with Connecting Cable 27806
26005 M	Unipolar High Frequency Cord
26176 LE	Bipolar High Frequency Cord

Mobile Videocart

5-002

29005 LAP



Headmirrors





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

including:

Headband, narrow

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

including:

Headband, wide



076090 ZIEGLER Headmirror,

replaceable mirror, diameter 90 mm,

including:

Headband, narrow

077090 ZIEGLER Headmirror,

replaceable mirror, diameter 90 mm,

including:

Headband, wide

Components/Spare Parts see chapter 14

1-0/

Headlight "CLAR 55"

with Lamp Illumination, Transformers





087200

Headlight "CLAR 55", including: Headband, wide Headlight Cable Spare Lamp, 6 V



102201 B

102201 B

Transformer, for light with one secondary circuit 2 – 12 V, for use with Headlight 087200 and Nystagmus Spectacles 138805, 138815, power supply 230 VAC, 50/60 Hz, dimensions: 175 x 100 x 125 mm (w x h x d), weight: 1.6 kg

7-07

Components/Spare Parts see chapter 14

LED Headlight POWER OF LIGHT



Special Features:

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

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



LED Headlight POWER OF LIGHT



Battery Versions

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

headband, illumination area adjustable from 10 - 100 mm in

diameter with 40 cm working distance

including: Headband Battery Box

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

094110 Same,

with yellowish light

Rechargeable Battery Versions

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

on headband, illumination area adjustable from 10 - 100 mm in

diameter with 40 cm working distance

including: **Headband**

Rechargeable Battery Box, with 1 Li-lon rechargeable battery

Battery Charger Li-Ion

Mains Cord

094130 Same,

with yellowish light

7-07

Components/Spare Parts see chapter 14

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
- Newly designed, 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, moveable 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





Y-Fiber Optic Light Cable

Clip with Band



Same,

including:

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

Components/Spare Parts see chapter 14

with Cold Light Illumination



Special Features:

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



094051

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

including:

Headband

Fiber Optic Light Cable

Clip with Band



Same,

including:

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

Components/Spare Parts see chapter 14

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







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



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

025 **Same**,

including:

Headband, with cross band

Components/Spare Parts see chapter 14

with Cold Light Illumination



Special Features:

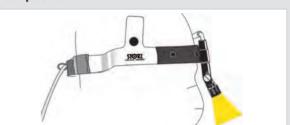
- Headlight can be adjusted in 3 dimensions: height adjustment on the headband, front can be turned 45° to the right or left and also tilted horizontally downwards to a max. of 165°
- Headlight is self-retaining in all positions; no deviation from the selected position
- Protective ring for the front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

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

90° position



165° position







094301

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

including:

Headband

Clip with Band



094305

Same,

including:

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

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Components/Spare Parts see chapter 14

-95°

PL-J 7 A

with Cold Light Illumination



Special Features:

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



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







094320

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

including:

Headband Clip with Band



094325

Same,

including:

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



094330

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

including: Headband Clip with Band



For use with Headlight 094330:

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

or

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

cold light fountain, diameter 2.5 mm, length 230 cm

Components/Spare Parts see chapter 14

Headlight "CLAR 73"

with Cold Light Illumination



Special Features:

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

Special Features:

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





095501

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

including:

Headband

Clip with Band



095505

Same,

including:

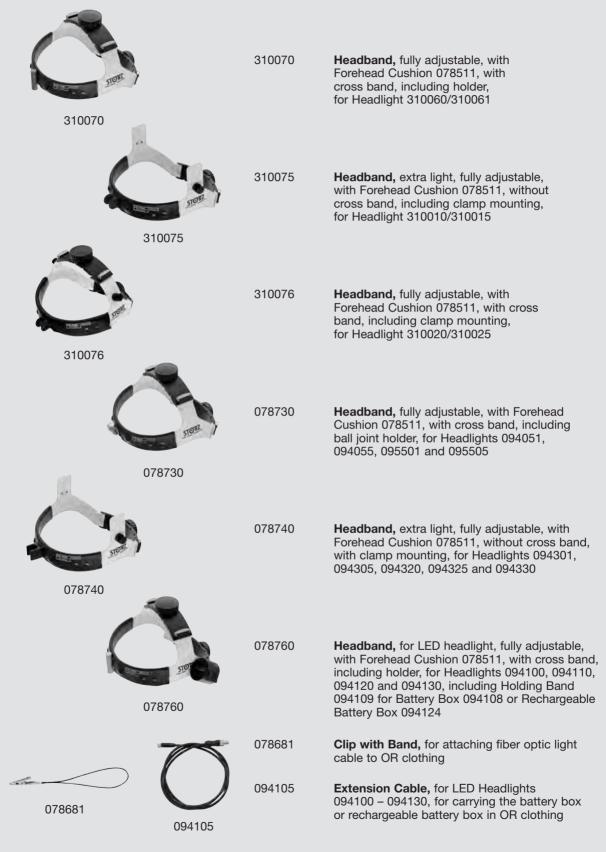
Fiber Optic Light Cable, with 90° deflection to the cold light source

Components/Spare Parts see chapter 14

Headbands

for Cold Light Illumination





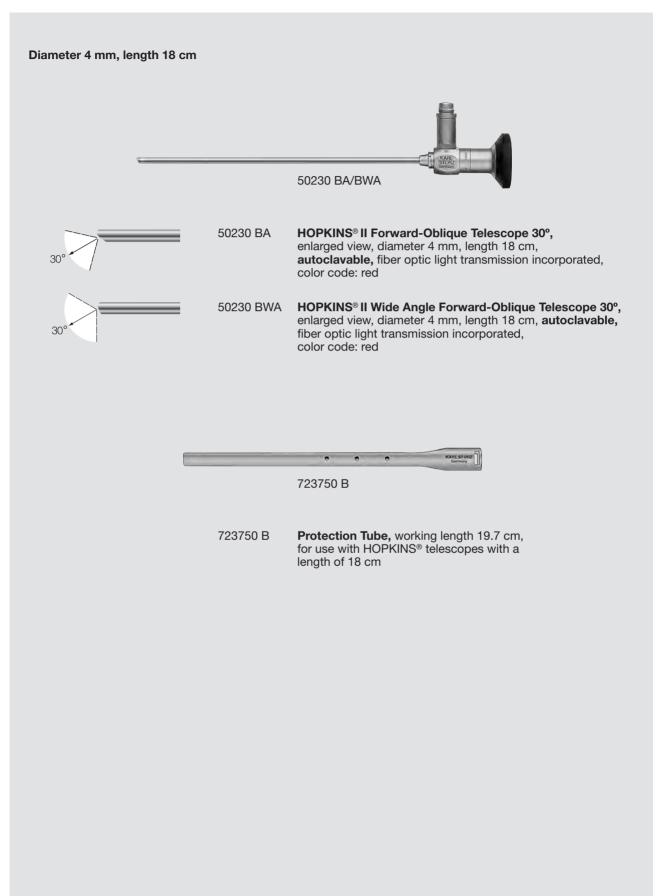
Components/Spare Parts see chapter 14



HOPKINS® II Telescopes

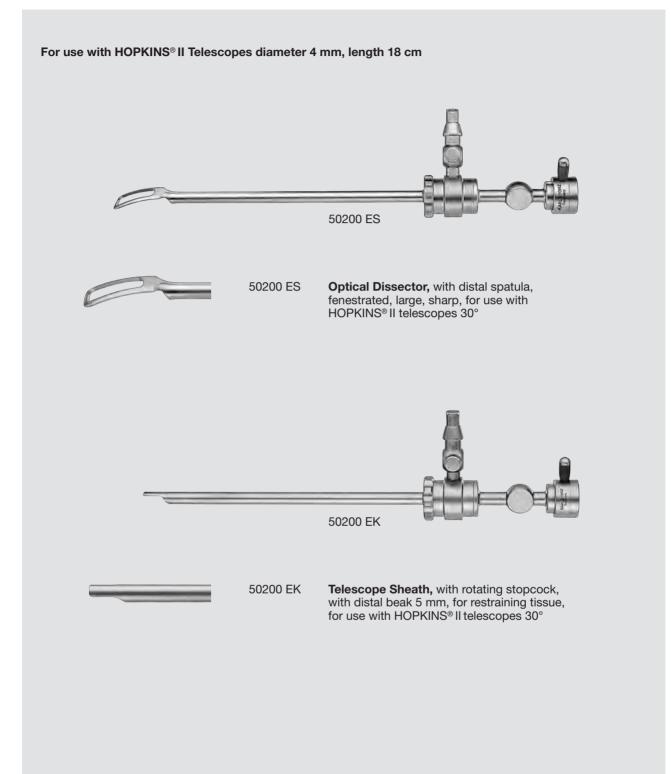








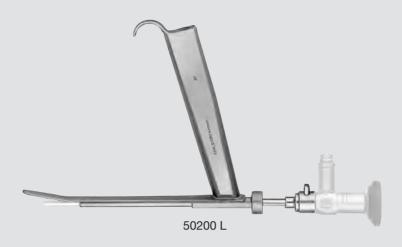








For use with HOPKINS® II Telescopes diameter 4 mm, length 18 cm



50200 L

Optical Retractor, with handle, width of distal end 8 mm, with fixation screw for control of penetration depth of endoscope, with Telescope Sheath 50200 LS, for use with HOPKINS® II telescopes diameter 4 mm, length 18 cm

Illuminated Retractor

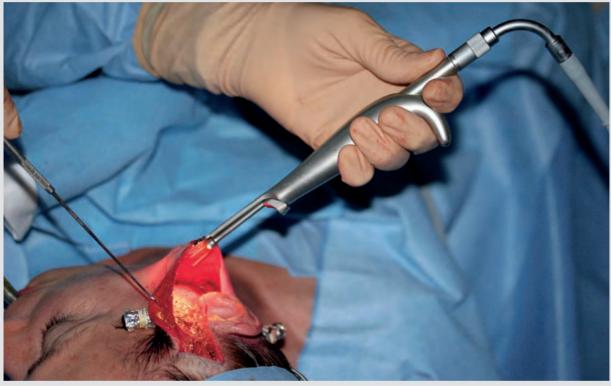


Light retractor with cold light carrier designed with a special focus on classic facelifts and for use with ultracision, if desired.

This new technology makes it necessary to tighten the skin flap during its detachment at an angle of 60 degrees, which complicates the illumination by the operating light. This retractor comprises two central sharp teeth, which make it possible to tighten the flap, and two lateral blunt teeth to maintain it. In addition, two illuminated heads pointing in different directions

allow a greater diffusion of light on the operative field. In addition to an illuminated retractor for the classic facelift, KARL STORZ offers a second version for use in the cervical lift procedure.

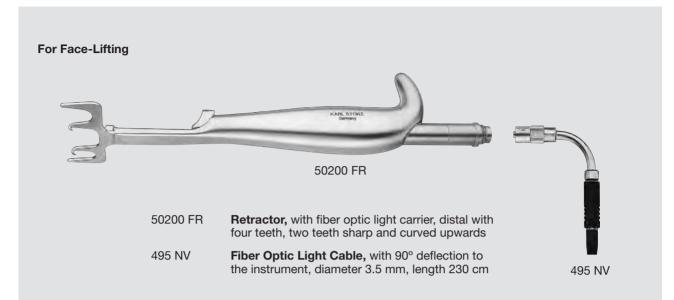
Dr. F. FIRMIN, Clinique Georges Bizet, Paris, France



lluminated retractor in use

Illuminated Retractor





For Cervical Lift Procedures



50200 FF

NEW 50200 FF

Retractor, with fiber optic light carrier, distal plate with two teeth curved upwards

TAKE-APART® Handles

for Raspatories, Elevators, Nerve Hooks and Knives



KARL STORZ TAKE-APART® – the new dismantable, autoclavable instruments for plastic surgery can be disassembled into two separate components: handle and working insert. Working inserts are offered in different shapes with a length of 6, 10 and 15 cm.

According to individual requirements, they can be combined with either of two handles: a standard COTTLE handle, as well as an ergonomically designed handle for the special requirements of the plastic surgeon.

The unique modular design of the reusable instruments offers the following benefits:

- Instruments can be quickly and easily dismantled and reassembled
- Choice of handle style and working inserts
- Interchangeable working inserts guarantee that the instruments are sharp and function perfectly at all times
- Completely autoclavable for increased patient safety

TAKE-APART® Instruments on the following pages consist of:

- Handle
- Working Insert

Within the groups of **Raspatories, Elevators, Nerve Hooks and Knives,** the handle and working insert can be exchanged.

The following handles are available:



50300 COTTLE TAKE-APART® Handle



50400 TAKE-APART® Ergonomic Handle

User Information

For easy location of the correct catalog number for the required TAKE-APART® instrument



How to find the required instrument:

- (a) Select the required length: 15 cm
- (b) Select the required working insert
- (c) Select the required handle style
- (d) The catalog number for the completely assembled instrument can be found at the point where the selected parameters intersect (see table below).

Example:



50410 A **TAKE-APART® Raspatory,** straight, width 9 mm, working length 15 cm, color code: red

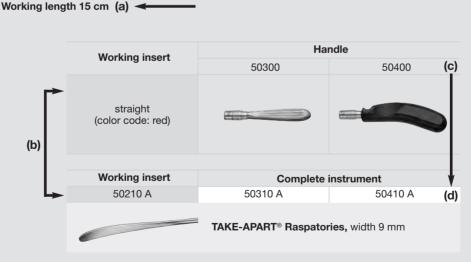
including:

50400 Ergonomic Handle 50210 A Working Insert

TAKE-APART® Raspatories

straight





Please note

Among **TAKE-APART**® instruments only the **single component parts** are numbered. The catalog number for the **complete instrument** is not etched on it. Please use the number shown on the following pages in the white background.

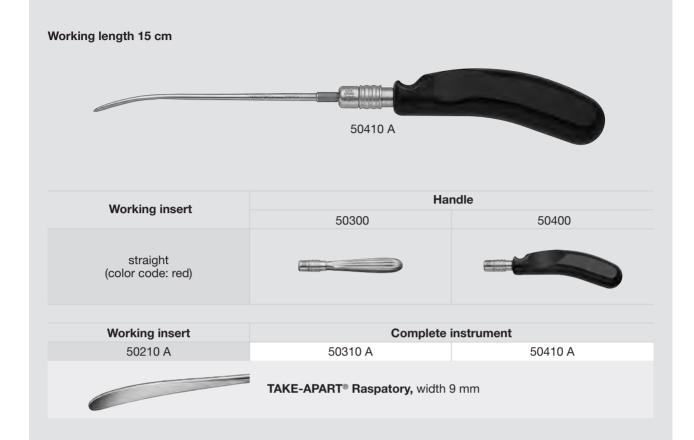
9-031

FL7B

TAKE-APART® Raspatories







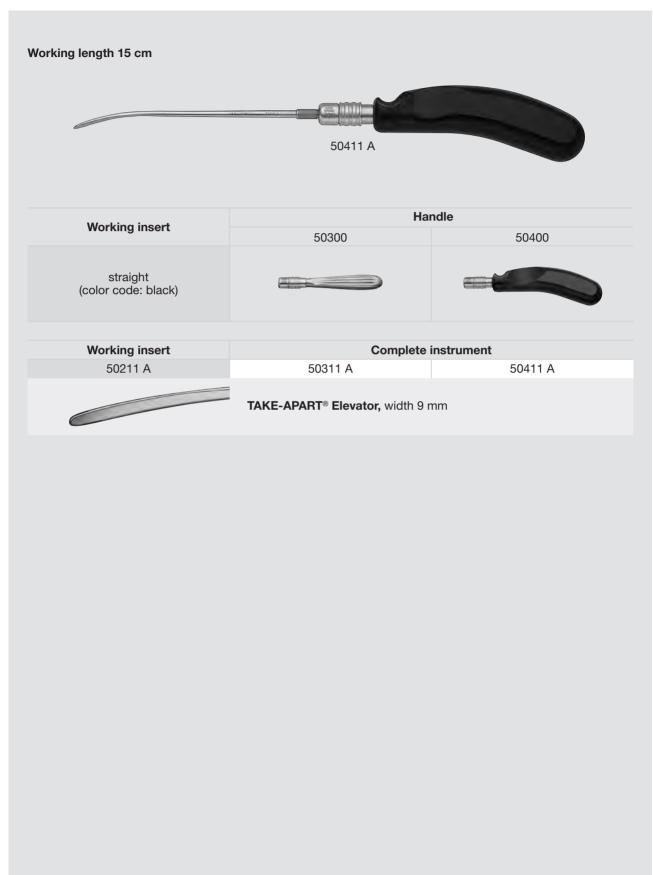
Working length 10 cm

Working insert	Complete instrument		
50210 SK	50310 SK	50410 SK	
	TAKE-APART® Raspatory, spatula slightly curved upwards, width 8 mm		
50210 UK	50310 UK	50410 UK	
TAKE-APART® Raspatory, flat spatula, width 8 mm			

TAKE-APART® Elevators



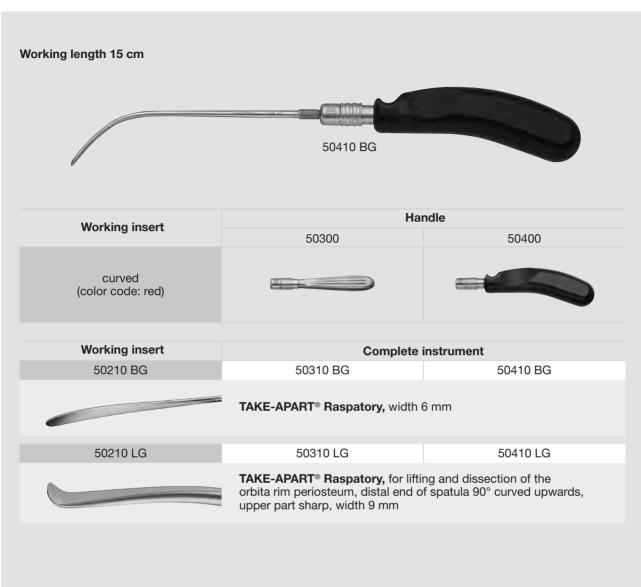




TAKE-APART® Raspatories



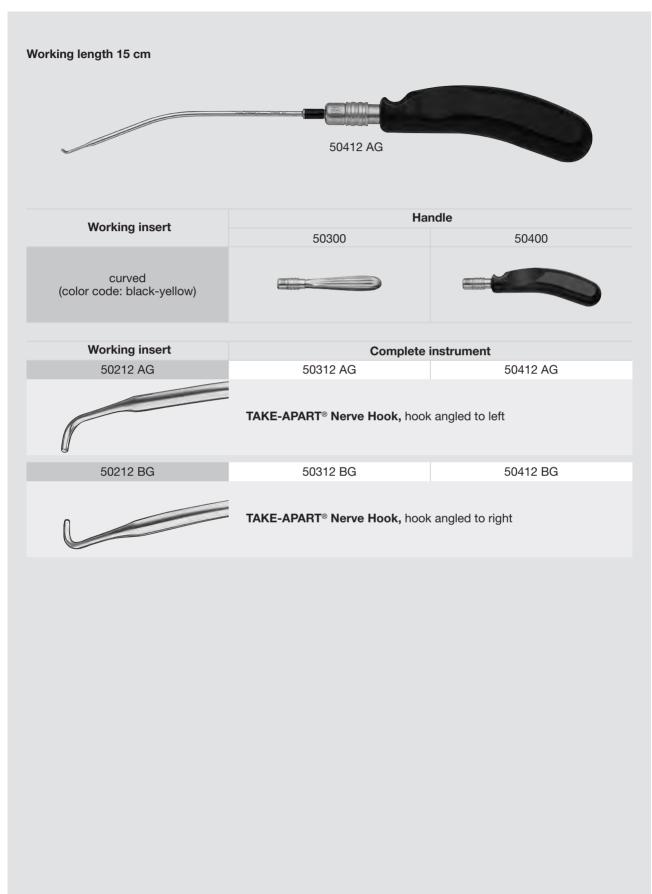




TAKE-APART® Nerve Hooks



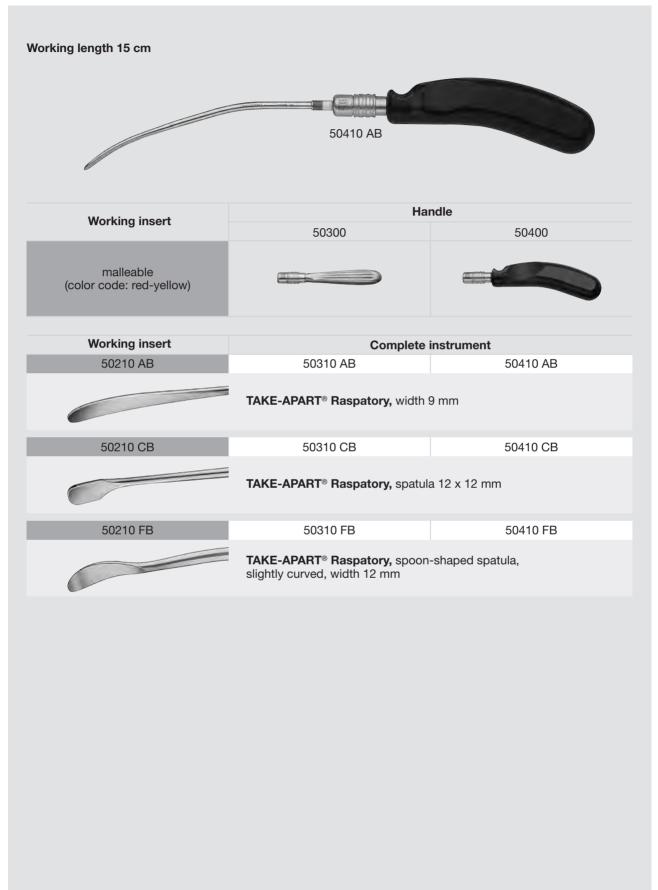




TAKE-APART® Raspatories



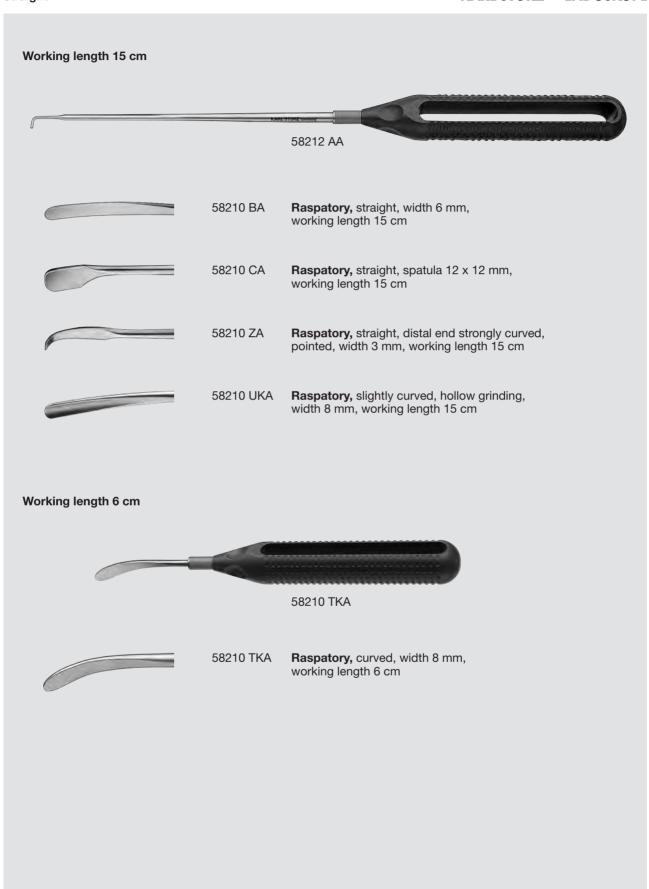




Raspatories

Set recommended by ROMO III M.D., **straight**



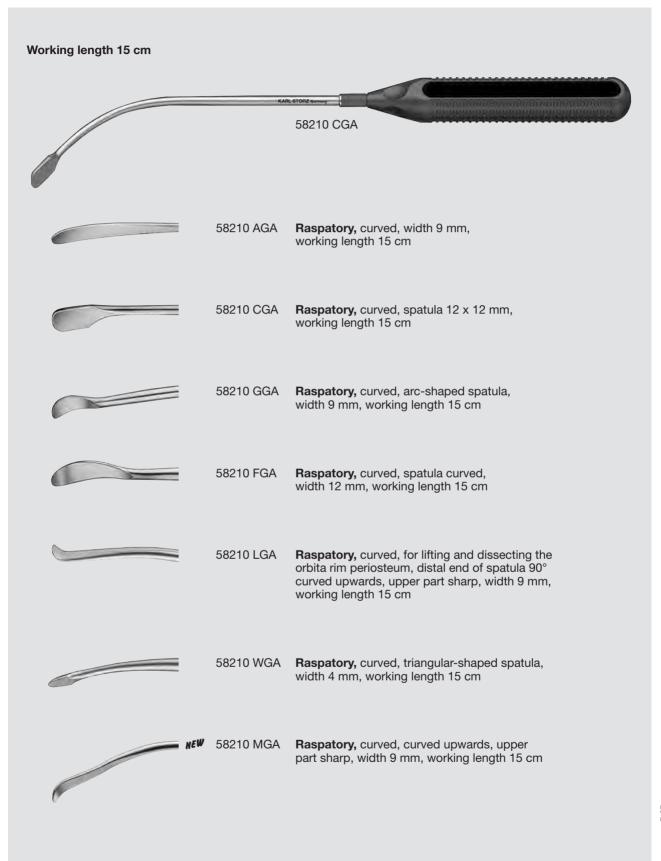


FL 13 C

Raspatories

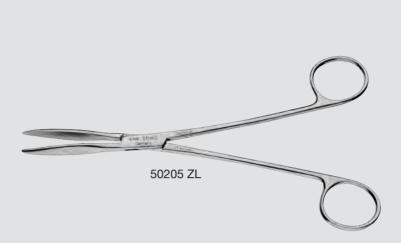
Set recommended by ROMO III M.D., curved









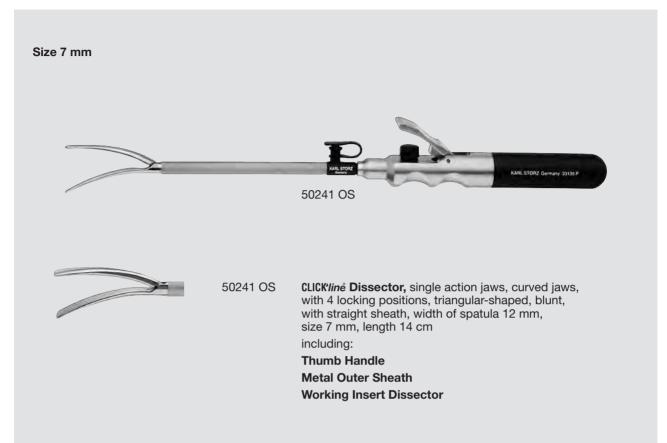


50205 ZL **Midface Dissector,** blunt, straight, jaws slightly curved, width of spatula 10 mm, length 20 cm

Dissector

Straight Sheath - CLICK'line, dismantling - non-rotating, with 4 locking positions





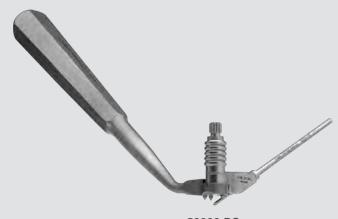
Components/Spare Parts see chapter 14

HÖNIG V-Tunnel Drill System



The new V-tunnel drill system enables precise V-tunnel drilling, which is used for the internal fixation of the temporalis muscle in face-lifting procedures (forehead lift). The KARL STORZ screws offer a high degree of safety as penetration depth is limited by a stop ring on

the drill. The system is used to create a V-tunnel through which sutures are then guided, eliminating the need for pins and screws for anchoring the temporalis muscle. Sutures can, therefore, be easily positioned without injuring the cerebrum.



50200 DS

50200 DS

V-Tunnel Drill System, with handle, with three teeth for secure fixation on the cranium, with rotating drill guide, for use with Drills 50200 DB/DK including:

Guide

Handle, with plate Fixation Screw

Not included in delivery of 50200 DS:

50200 DK **Drill,** with penetration stop, diameter 1.3 mm,

length 7.5 cm, for use with V-Tunnel Drill System

50200 DS

50200 DB Same, diameter 2.1 mm

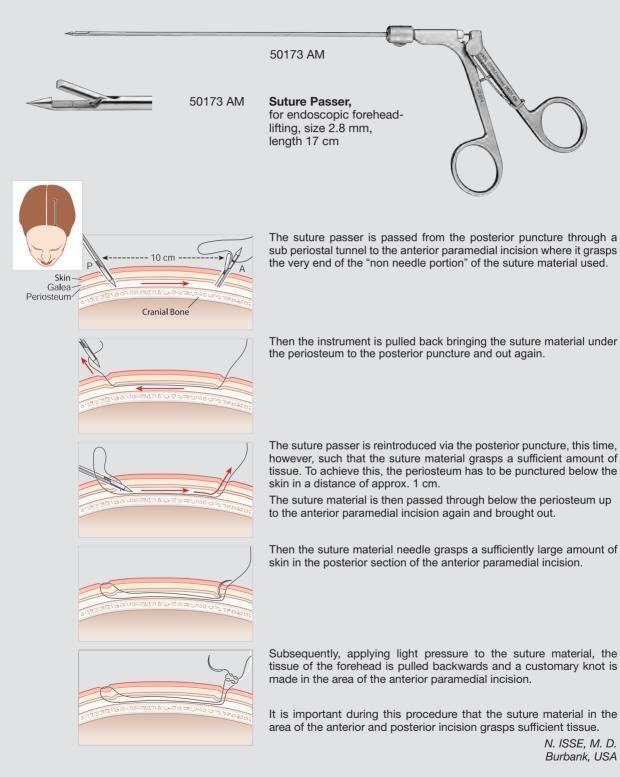
12-11

Components/Spare Parts see chapter 14

FL 17 C 61

Suture Passer





Legend:

A = anterior paramedial incision in the frontal area

P = posterior puncture through all tissue layers of the occipital area approx. 10 cm behind the anterior paramedial incision

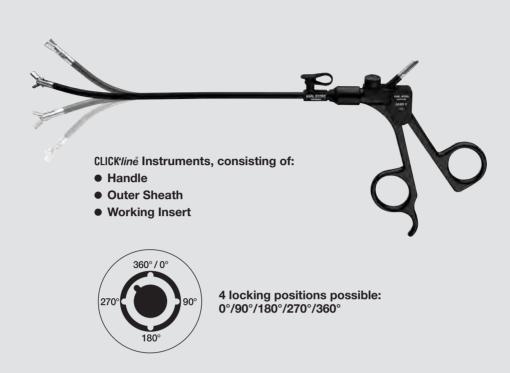
The sub periostal tunnel is the space between the periosteum and the skull.

The red arrows mark the path of the suture passer.

KARL STORZ CLICK'line

rotating, dismantling, endoscopic instruments





Nothing could be simpler!

The CLICK'line series continues the development of the TAKE-APART® instruments which have proven their value for years. The simplicity of handling and ease with which the TAKE-APART® instruments can be cleaned has been improved in the CLICK'line series, in particular in respect of assembly and disassembly.

When the rear handle is positioned horizontally, the handle can be separated from the outer tube 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.

The CLICK'line series has also been expanded by a range of new handles, such as a new robust metal handle with insulation and the two CUSCHIERI Ball and Pencil handles.

This unique reusable three-piece design offers the surgeon the following benefits:

- Available in sizes 3 and 5 mm, with a length of 18 cm
- Choice of handle styles
- 4 locking positions of the sheath facilitate easy access in all clinical situations
- No hidden spaces that can trap blood or tissue debris
- Easy to dismantle at the push of a button, which significantly reduces cleaning time
- Fully autoclavable

- Cost-effective reusable instruments reduce OR costs per case and simplify inventory management which eliminates 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
- User-friendly and ergonomic handling
- Cleaning port allows the instruments to be cleaned without disassembly

Due to the modular CLICK'line system, the user can individually assemble the desired instrument at any time.

Please note:

TAKE-APART® working inserts with ball ends can be used with CLICK*line and CLICK*line outer sheaths.

User Information

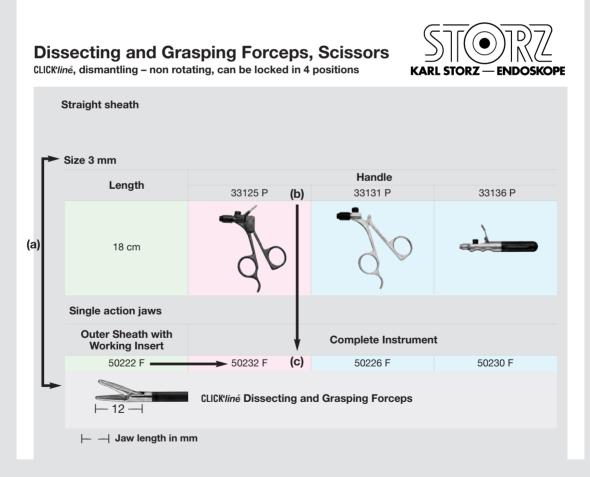
for easy location of the correct catalog number for the required CLICK'line instrument



How to find the required instrument:

- (a) Select the required instrument size and the required type of jaws
- (b) 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
- (c) 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.





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.

Metal Handles

for Scissors, Dissecting and Grasping Forceps, CLICK'line – without connector pin for unipolar coagulation







33131 P CLICK'line Metal Handle, without ratchet, with 4 locking positions

3136 P **CLICK'line Handle,** with thumb release, with 4 locking positions



33133 P CLICK'line Metal Handle, with hemostat style ratchet, with 4 locking positions

Metal Outer Sheath



50220 T

50220 T CLICK'line Metal Outer Sheath, LUER-Lock irrigation connector for cleaning, size 5 mm, length 18 cm

Metal Handles

for Scissors, Dissecting and Grasping Forceps, insulated, CLICK*line – with connector pin for unipolar coagulation





unipolar

33125 P CLICK'line Metal Handle, non-rotating, without ratchet, with 4 locking positions

Outer Sheath, insulated



50220 R

50220 R CLICK'line Outer Sheath, insulated, with LUER-Lock irrigation connector for cleaning, size 5 mm, length 18 cm

CLICK'line Outer Sheath, insulated



50222 GW

CLICK*line* Outer Sheath, with forceps insert, insulated, curved, with LUER-Lock irrigation connector for cleaning, double action jaws, robust, opens horizontally, size 3 mm, length 18 cm



Plug, for LUER-Lock connector for cleaning, **black, autoclavable,** package of 10

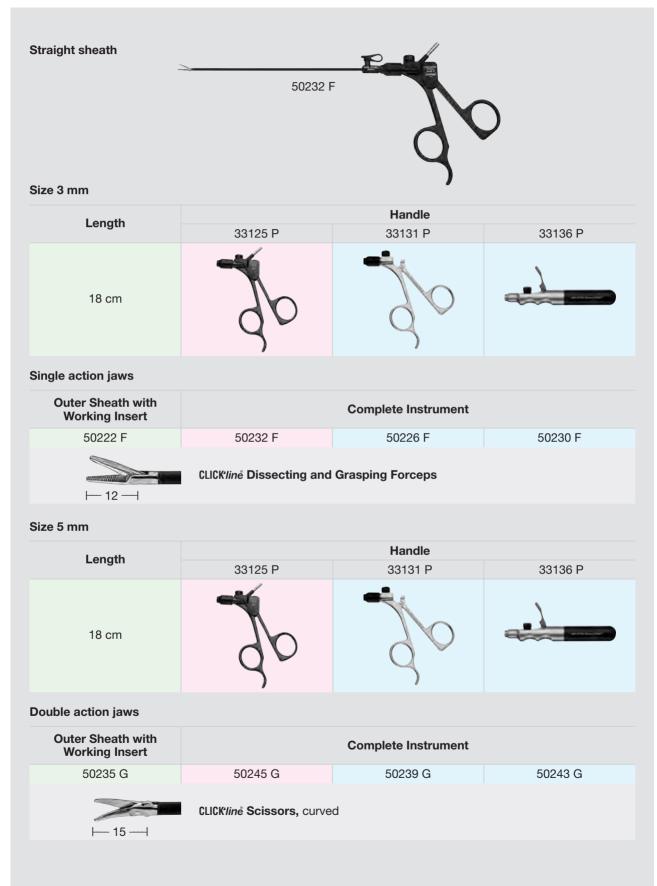
Color-Coded Plug, for LUER-Lock connector for cleaning, red, green, black, 10 each, package of 30, for easier identification of jaws on the OR table

High Frequency Cords for unipolar coagulation see chapter 13, UNITS

Dissecting and Grasping Forceps, Scissors

CLICK'line, dismantling - non rotating, can be locked in 4 positions





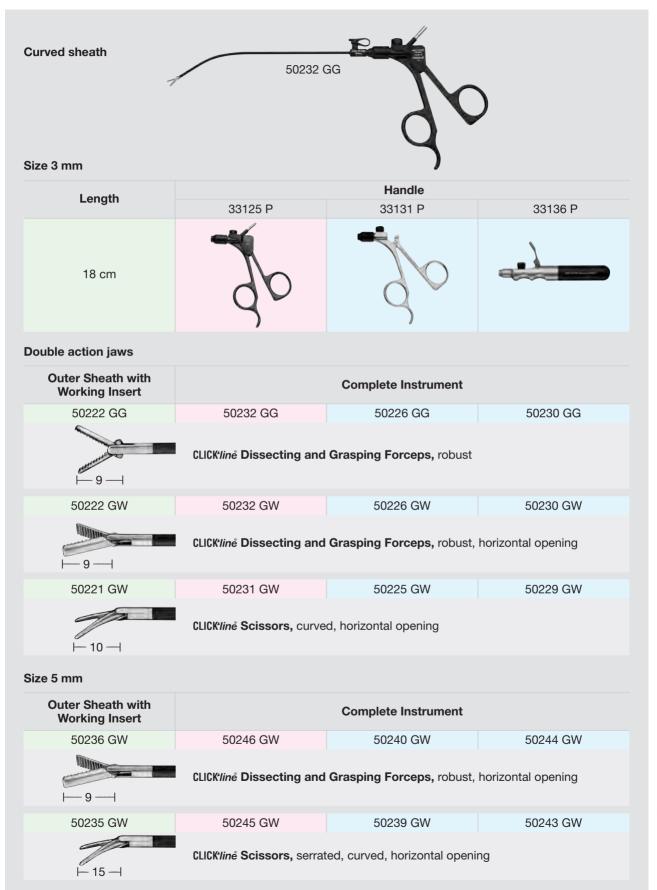
10-983

FL 23 B 67

Dissecting and Grasping Forceps, Scissors

CLICK'line, dismantling - non rotating, can be locked in 4 positions





Handles

for Bipolar Forceps, TAKE-APART® - with connector pin for bipolar coagulation



TAKE-APART® Standard Bipolar Instruments, consisting of:

- Outer Sheath
- Working Insert



For bipolar instruments the handle, outer sheath and working insert can be exchanged. The following alternatives are available:

Handles for instruments, size 5 mm



Handle

26196 HR **TAKE-APART® Bipolar Spring**



26196 HM

TAKE-APART® Bipolar Ring Handle

Outer Sheath for instruments, size 5 mm



50203 BS TAKE-APART® Outer Sheath, with irrigation connector, length 15 cm

High Frequency Cords for bipolar coagulation see chapter 13, UNITS

User Information

For easy location of the correct catalog number for the required TAKE-APART® instrument



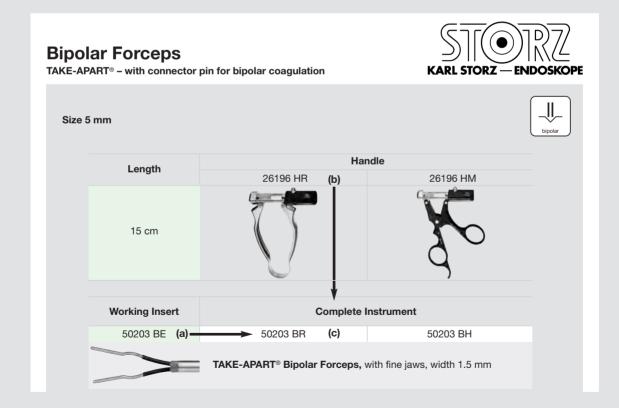
How to find the required instrument:

- (a) Select the required type of jaws
- (b) Select the required handle style
- (c) The catalog number of the completely assembled instrument can be found at the point where the selected parameters intersect (see table below).

50203 BR TAKE-APART® Bipolar Forceps, with fine jaws, width 1.5 mm, size 5 mm, length 15 cm including: 26196 HR Bipolar Spring Handle 50203 BS Outer Sheath,

50203 BE Forceps Insert

with irrigation connector



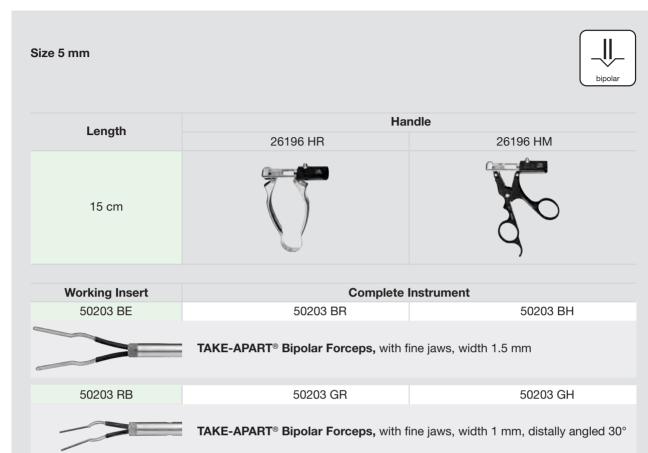
Please note:

Among **TAKE-APART**® instruments only the **single component parts** are numbered. The number for the **complete instrument** is not etched on it. Please use the number shown on the following pages in the white background.

Bipolar Forceps







11-98

Note:

Additional instruments for bipolar and unipolar coagulation see also chapter 6









30804

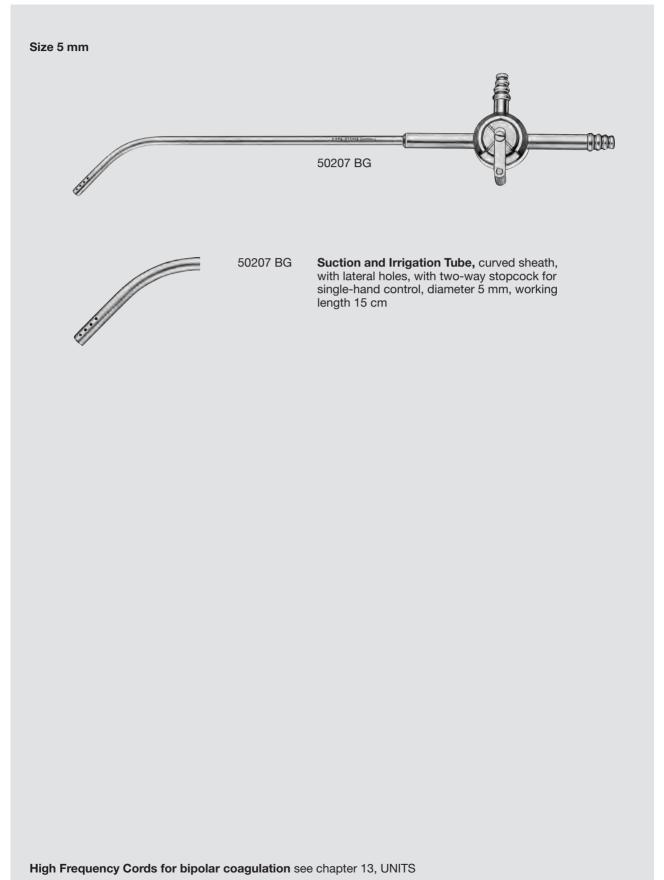
Handle with Trumpet Valve, for suction or irrigation, **autoclavable,** for use with 5 mm coagulating suction tubes and 5 mm suction and irrigation tubes



High Frequency Cords for unipolar coagulation see chapter 13, UNITS



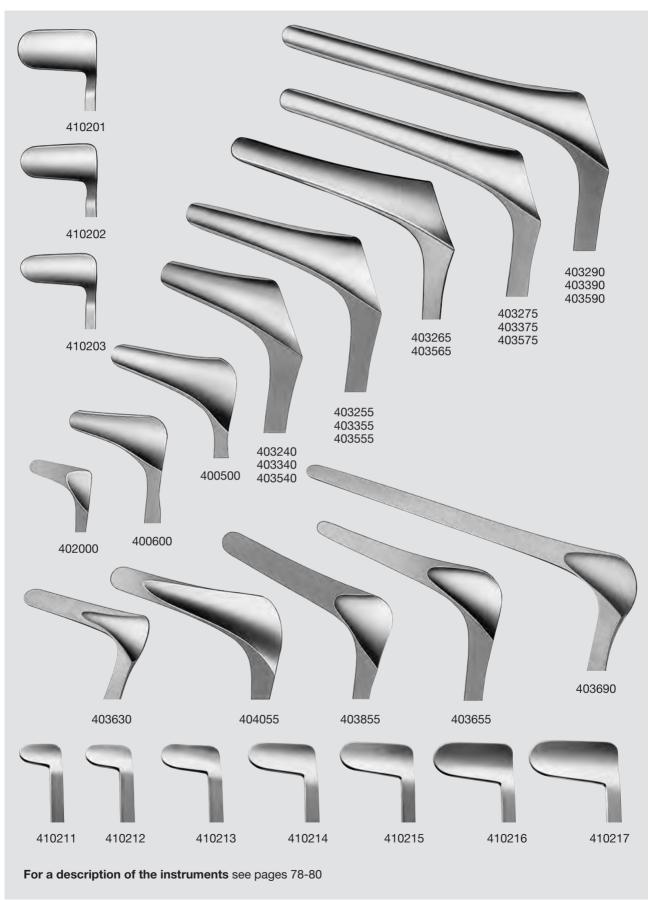
Suction and Irrigation Tube





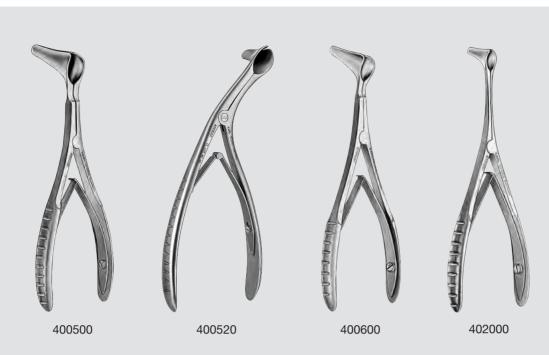
Instruments for Nose and Rhinoplasty

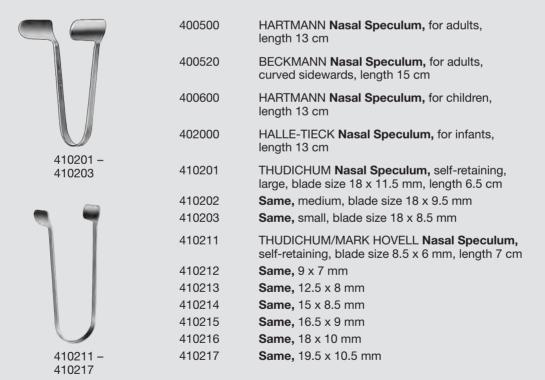




Instruments for Nose and Rhinoplasty







Components/Spare Parts see chapter 14

Instruments for Nose and Rhinoplasty

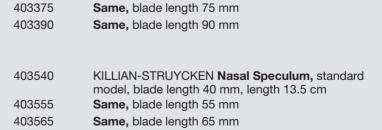




403575

403590





Same, blade length 75 mm

Same, blade length 90 mm



Components/Spare Parts see chapter 14

RHP 5 D

Instruments for Nose and Rhinoplasty









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

Components/Spare Parts see chapter 14









404555 -404575

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
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
404565	Same, right blade length 65 mm
404575	Same, right blade length 75 mm

Instruments for Nose and Rhinoplasty





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

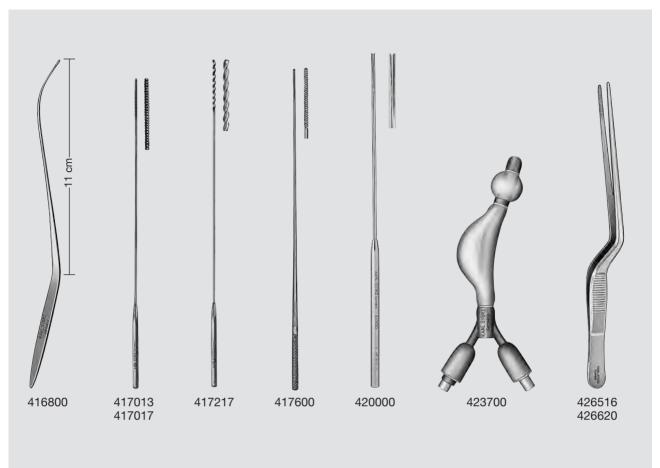
723017	Rotating Clamp, with holding rod for Flexible Tension Arms 723018 and 28162 FB, attachable to the operating table's sliding rail
723018	Flexible Tension Arm, length 50 cm
723020	Connector, for Flexible Tension Arm 723018, attachable to rods up to diameter 16 mm

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

Components/Spare Parts see chapter 14

Instruments for Nose and Rhinoplasty



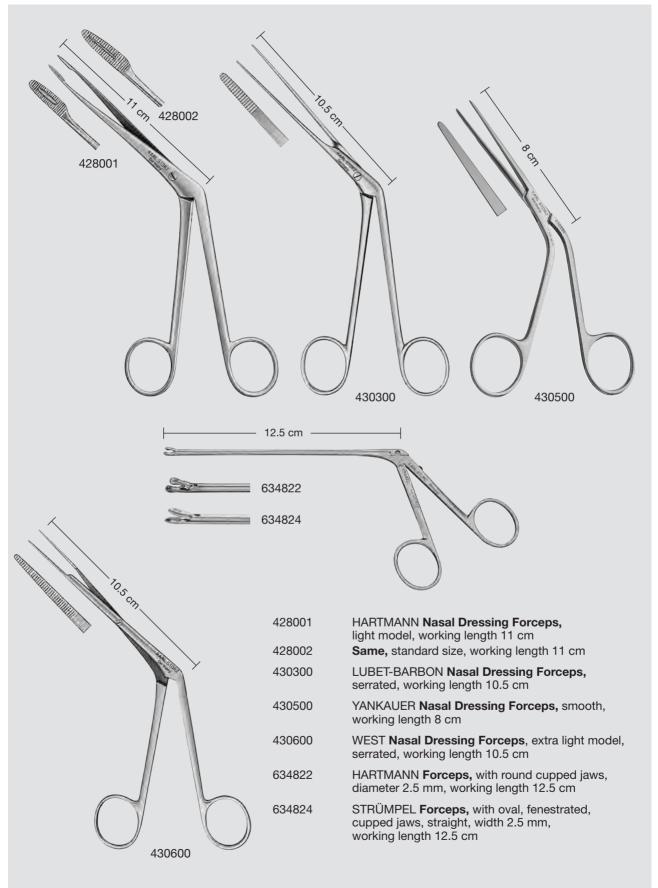




6-06

RHP 9 D 83





Instruments for Nose and Rhinoplasty





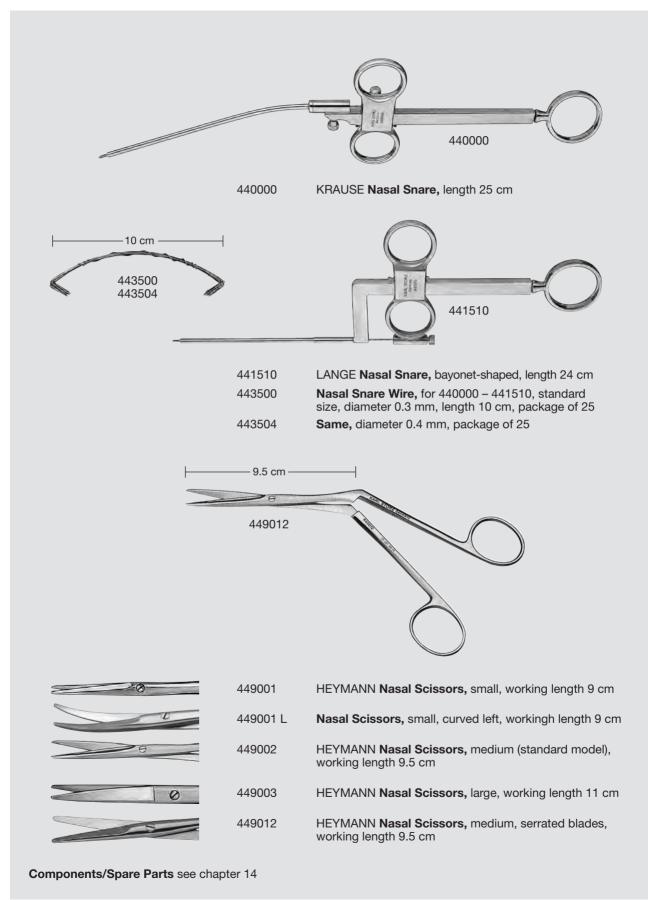


436610	Nasal Atomizer, straight, including graduated Container 10455 for local anaesthetic, for use with Rubber Bulb 437000
437000	Rubber Bulb, for Nasal Atomizer 436610, latex-free
437520	DE VILBIS Nasal Atomizer, with adjustable tip, rubber bulb and large bottle
437600	DE VILBIS Nasal Atomizer, with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

Components/Spare Parts see chapter 14

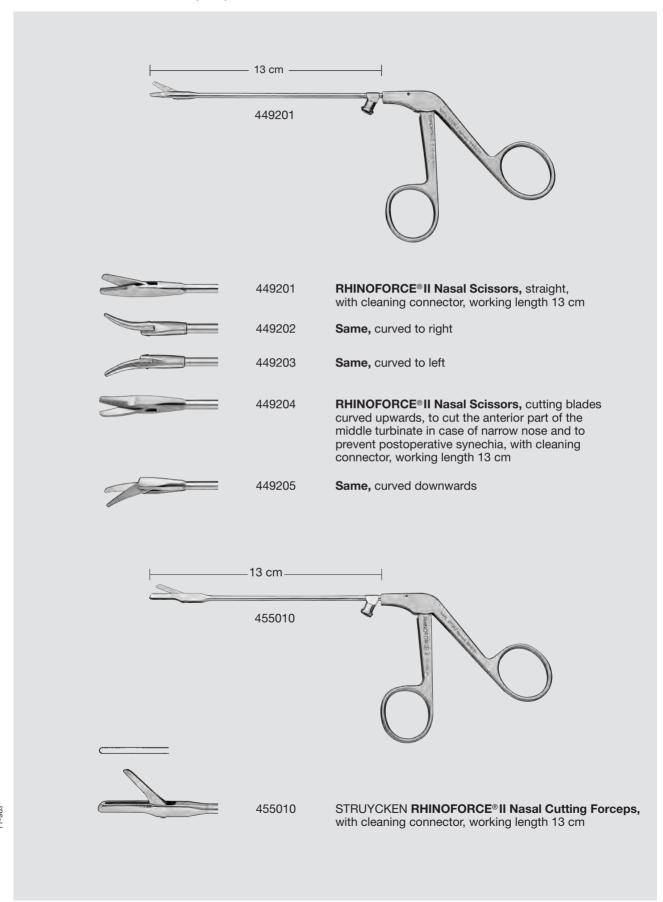
Instruments for Nose and Rhinoplasty





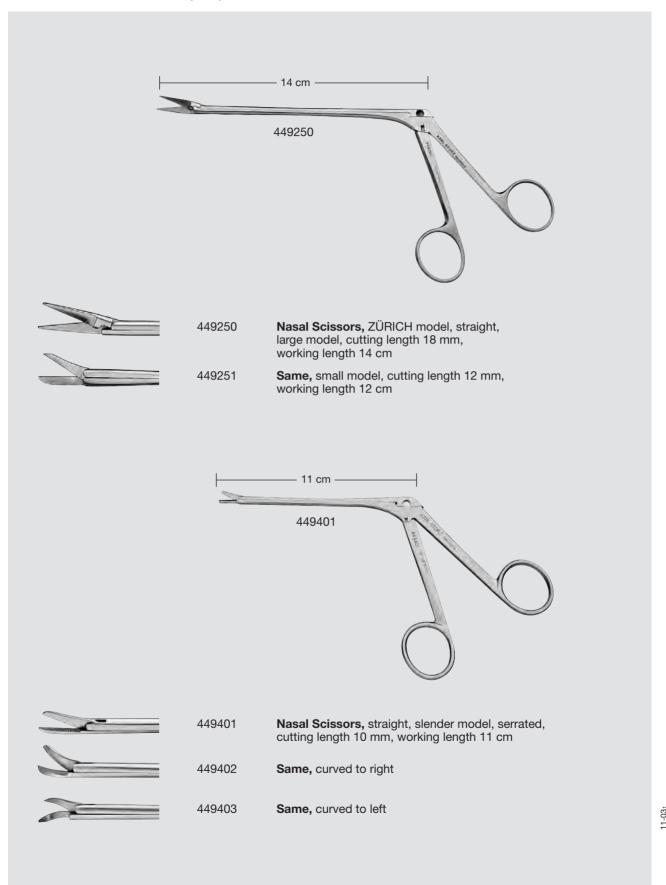
Instruments for Nose and Rhinoplasty





Instruments for Nose and Rhinoplasty

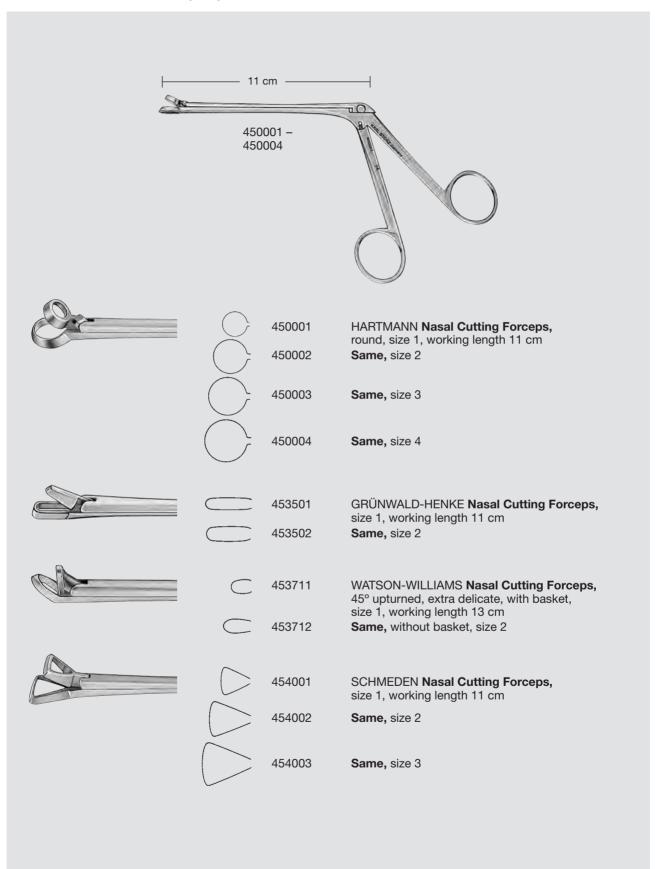




88 RHP 14 D

Instruments for Nose and Rhinoplasty





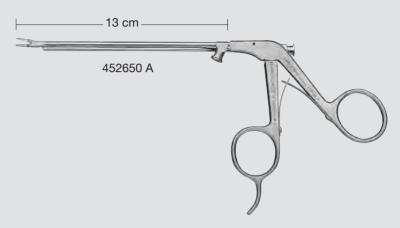
11-982

RHP 15 D 89



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

Winner of the 2006 Cutler Surgical Prize





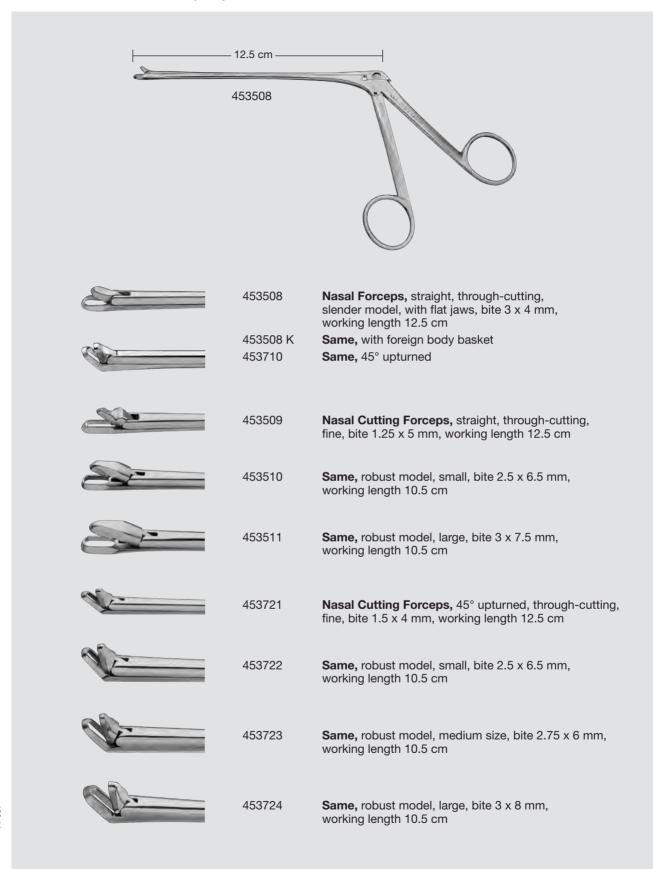
The **Cutlers' Surgical Prize** is one of the most prestigious annual awards for innovation in the design or application of surgical instruments or techniques. The prize as well as the Clarke medal are awarded by the surgical association and the president of the Royal College of Surgeons of England.

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

Instruments for Nose and Rhinoplasty



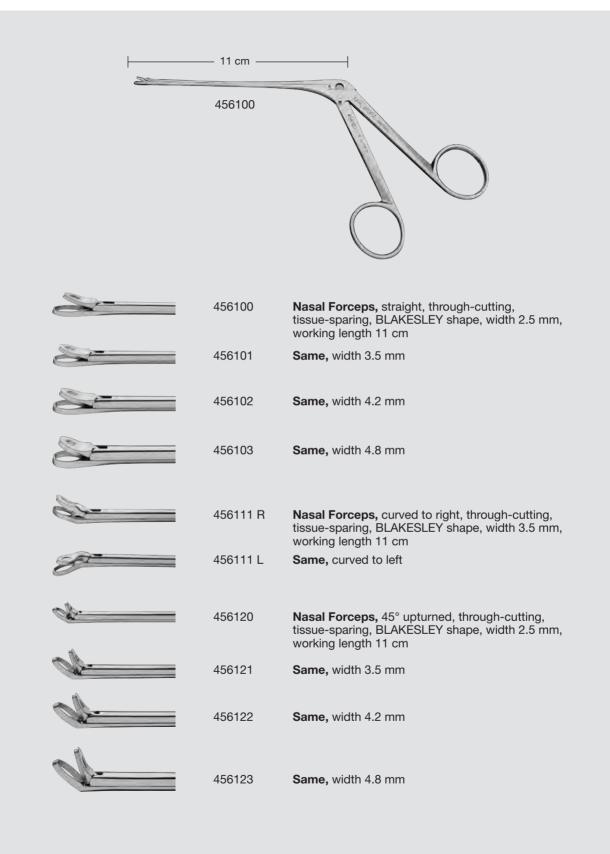


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RHP 17 D 91

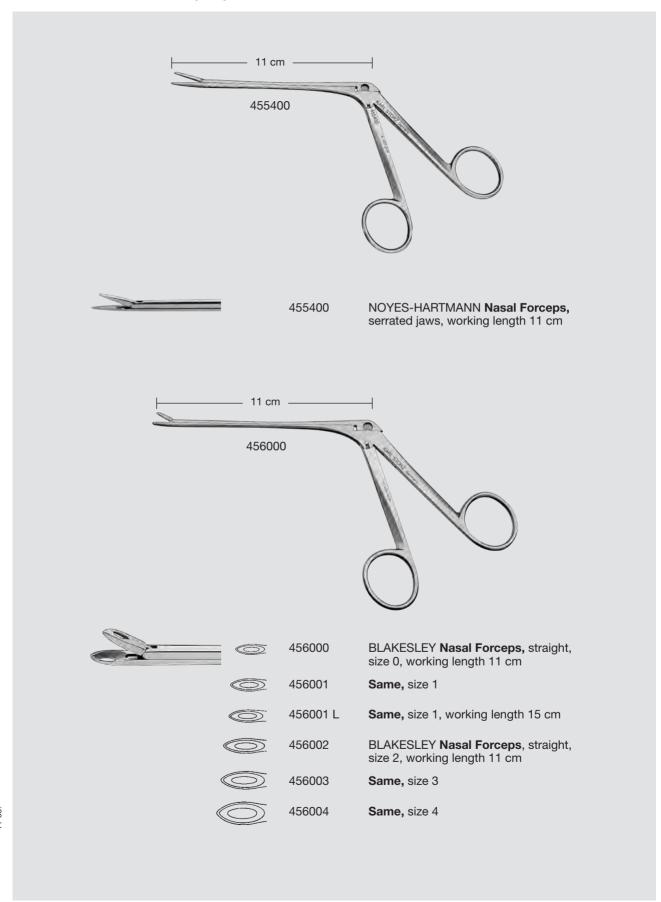
Instruments for Nose and Rhinoplasty





Instruments for Nose and Rhinoplasty

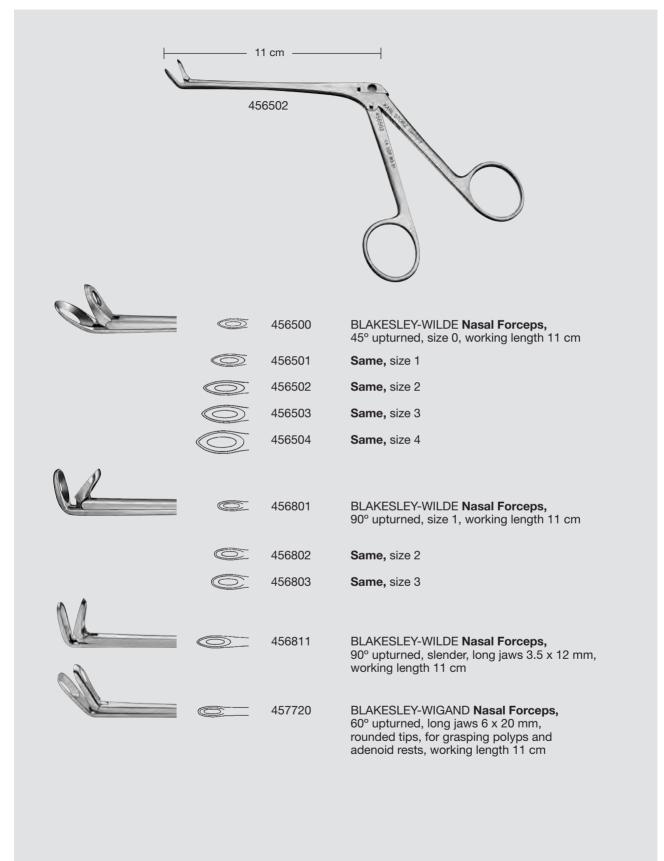




RHP 19 D

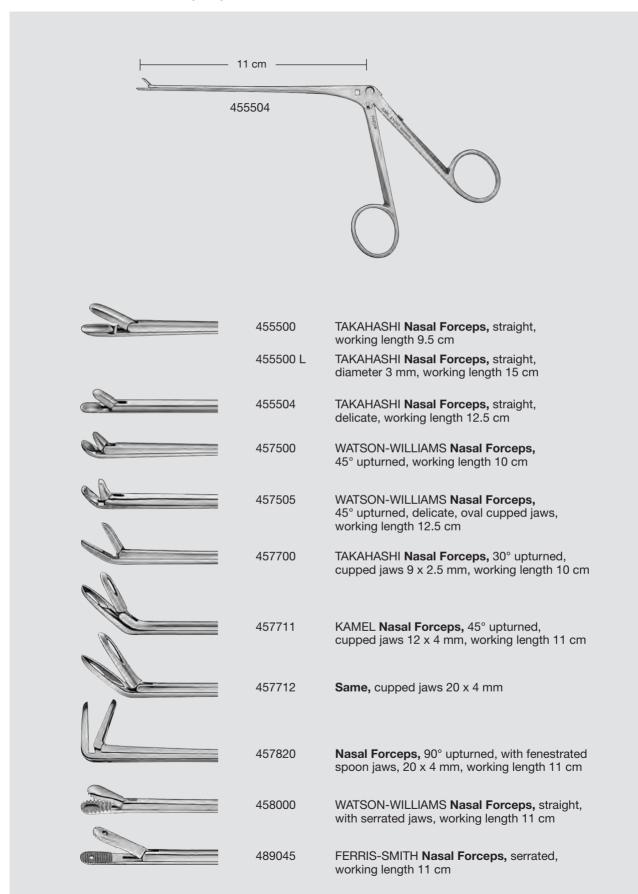
Instruments for Nose and Rhinoplasty





Instruments for Nose and Rhinoplasty



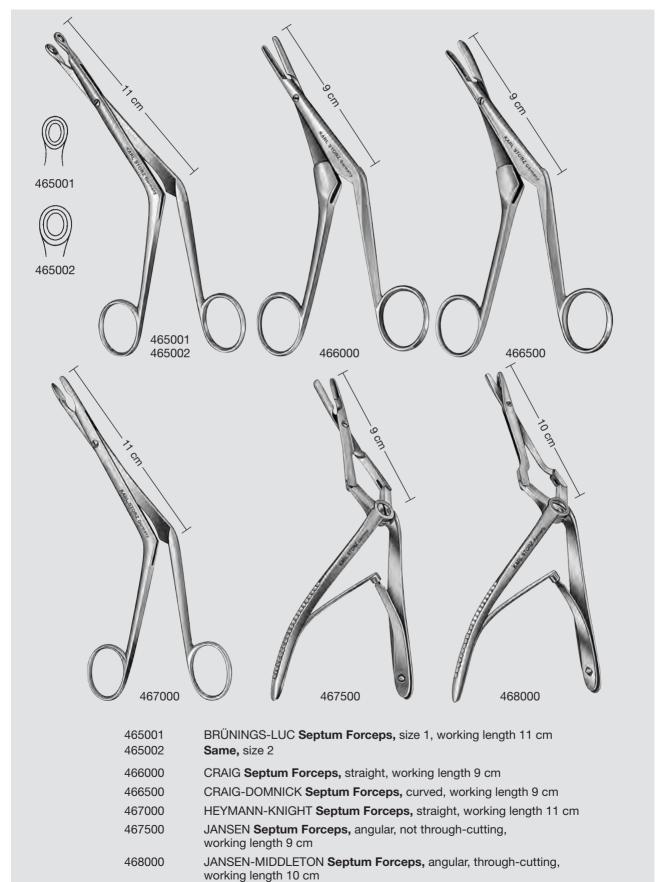


11-032

RHP 21 D 95

Instruments for Nose and Rhinoplasty





3-87

96 RHP 22 D

Instruments for Nose and Rhinoplasty





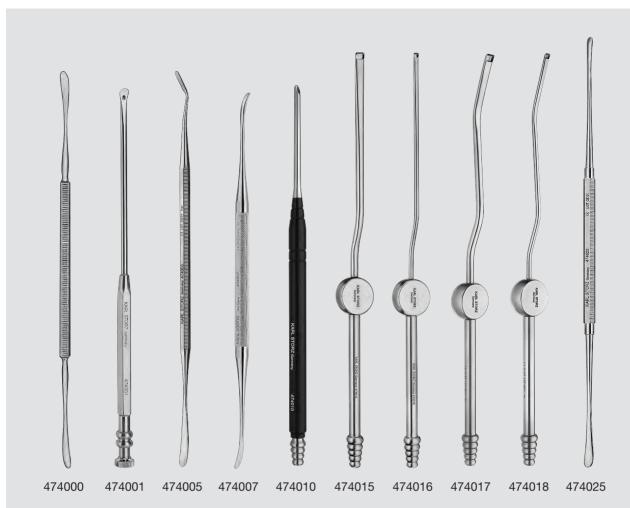
468500	BECKER-CAPLAN Septum Scissors , double action jaws, serrated, working length 9.5 cm
469000	KAZANJIAN Nasal Hump Forceps, length 20 cm
469200	ROWLAND-MEYER Nasal Hump Forceps, double action jaws, curved blades, length 20 cm
469600	RUBIN Septum Morcelizer , with double joint, working length 8.5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

 $3-99_{2}$

Instruments for Nose and Rhinoplasty

474000



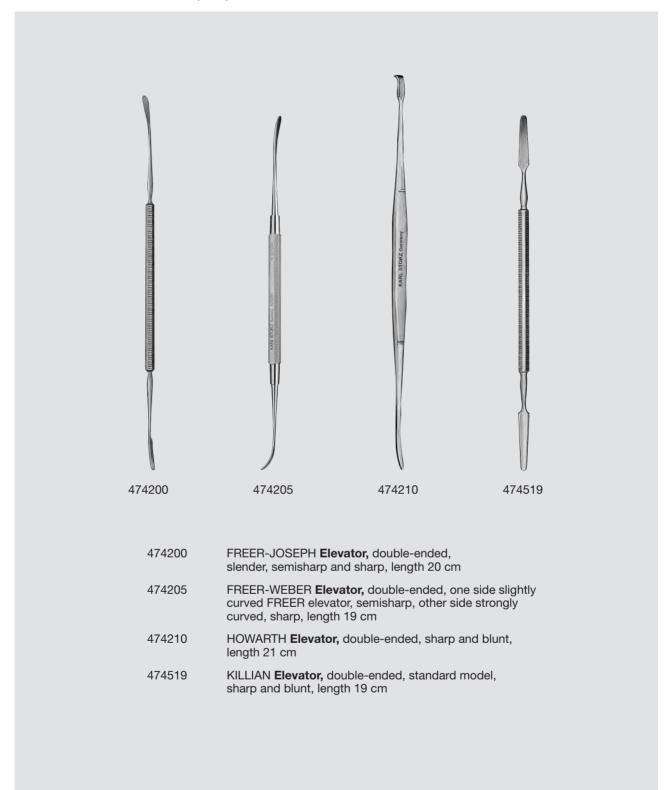


		length 20 cm
	474001	FREER Suction Elevator, with stylet, length 19 cm
	474005	FREER-JACOBS Elevator , double-ended, semisharp, one side slightly curved FREER elevator, width 5 mm, other side JACOBS elevator, angled 45°, width 2.5 mm, length 20 cm, for infundibulotomy
	474007	FREER-YASARGIL Elevator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

FREER Elevator, double-ended, semisharp and blunt,

Instruments for Nose and Rhinoplasty



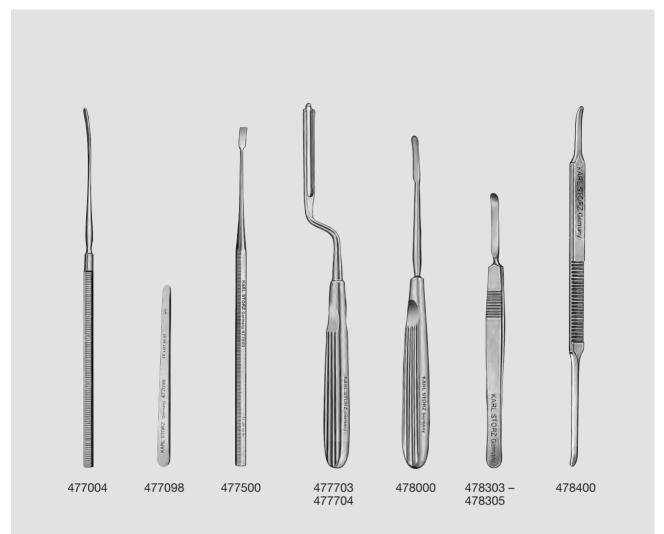


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RHP 25 D 99

Instruments for Nose and Rhinoplasty

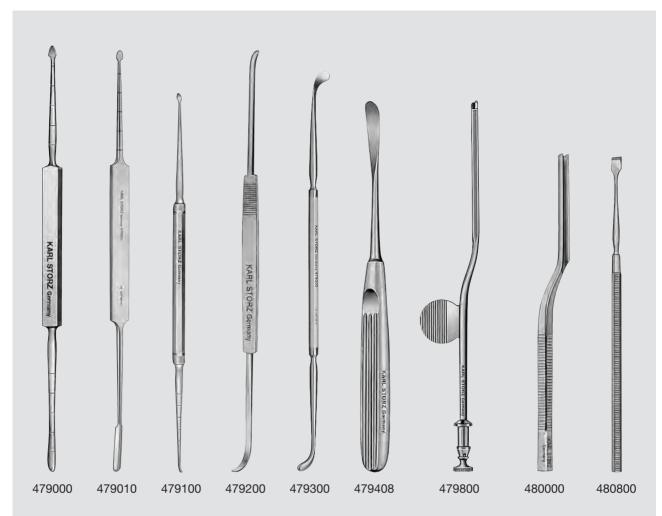




HALLE Elevator , blunt, width 4 mm, length 19 cm
Ala Dilator, for preparation and cutting of nostril cartilage, graduated, width 5 x 8 mm, length 9.5 cm
FREER Raspatory , curved, width 4 mm, length 18 cm
BALLENGER Swivel Knife , bayonet-shaped, width 3 mm, length 19.5 cm
Same, width 4 mm
JOSEPH Raspatory, slightly curved, length 17.5 cm
McKENTY Raspatory, width 3 mm, length 14.5 cm
Same, width 4 mm
Same, width 5 mm
McKENTY Elevator, double-ended, width 4.5 and 5 mm, length 19 cm

Instruments for Nose and Rhinoplasty





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

 $3-99_{3}$

Instruments for Nose and Rhinoplasty



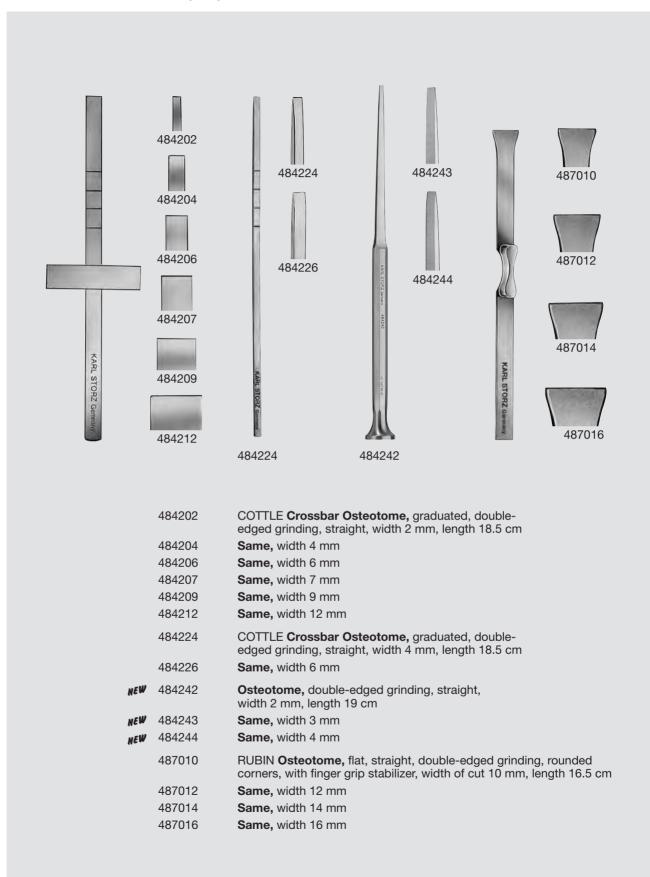


174200	COTTLE Metal Mallet, length 18 cm
174420	Metal Mallet, small model, diameter 20 mm, length 19.5 cm
174426	Metal Mallet, medium model, diameter 26 mm, length 19.5 cm
174430	Metal Mallet, large model, diameter 30 mm, length 19.5 cm
174700	Metal Mallet, with NYLON replacement, small, lightweight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

Components/Spare Parts see chapter 14

Instruments for Nose and Rhinoplasty



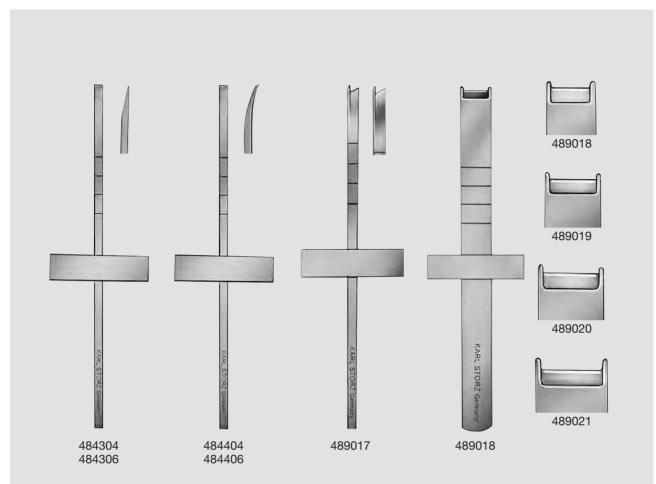


12-11

RHP 29 D 103

Instruments for Nose and Rhinoplasty

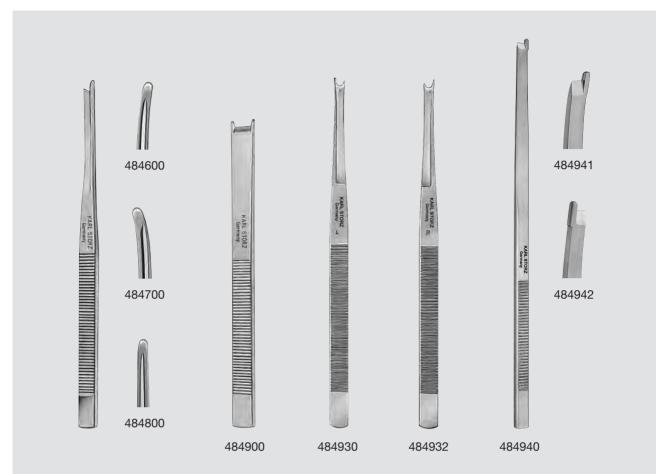




484304	COTTLE Crossbar Chisel, graduated, single-edged grinding, straight, width 4 mm, length 18.5 cm
484306	Same, width 6 mm
484404	COTTLE Crossbar Chisel, graduated, single-edged grinding, curved, width 4 mm, length 18.5 cm
484406	Same, width 6 mm
489017	COTTLE Crossbar Osteotome , graduated, double-edged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

Instruments for Nose and Rhinoplasty





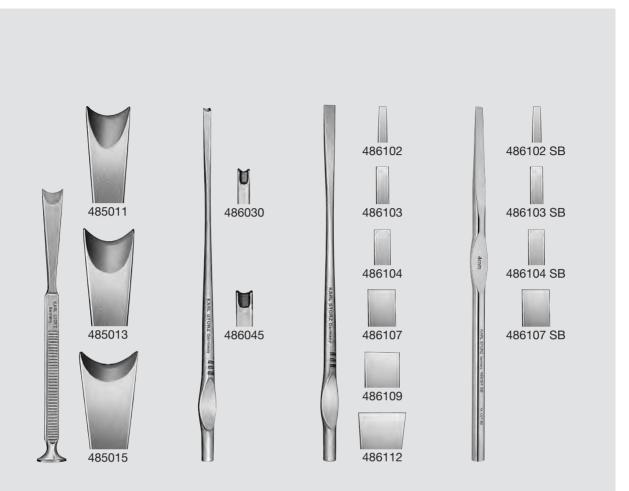
484600	MASING Chisel, slightly curved, with rounded guard right side, length 18 cm
484700	Same, on left
484800	Same, straight
484900	MASING Chisel, straight, double-guarded, width of cut 10 mm, length 16 cm
484930	GUASTELLA-EY Osteotome , for lateral osteotomy, with medial rounded guard to protect tissue,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

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RHP 31 C 105

Instruments for Nose and Rhinoplasty

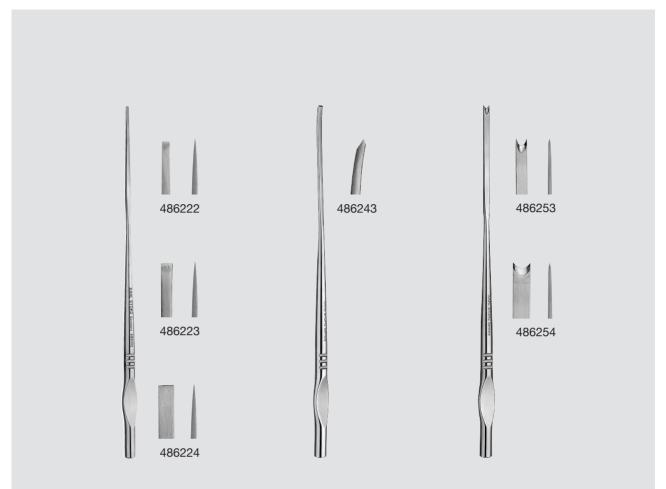




485011 485013 485015	McINDOE Chisel, hollow, width 11 mm, length 14.5 cm Same, width 13 mm Same, width 15 mm
486030 486045	WALTER Gouge , hollow, width 3 mm, length 19 cm Same , width 4.5 mm
486102	WALTER Osteotome , flat, double-edged grinding, width 2 mm, length 19 cm
486103	Same, width 3 mm
486104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

Instruments for Nose and Rhinoplasty





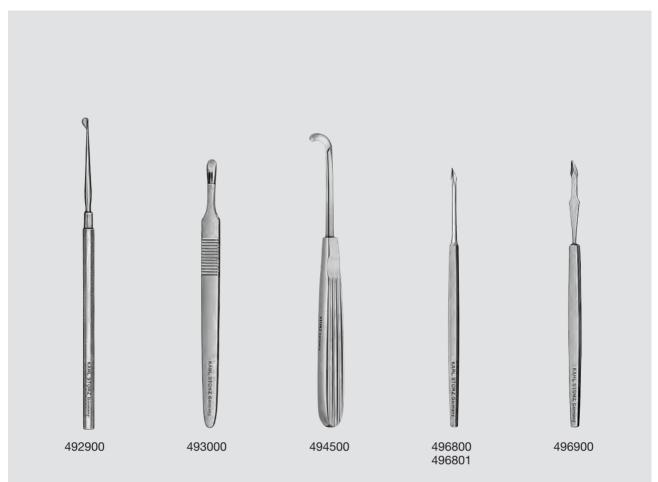
486222	BEHRBOHM-WALTER Micro Osteotome , extra delicate, long flat blade, double-edged grinding, with round ergonomic handle and finger grip plate, width 2 mm, length 19 cm
486223	Same, width 3 mm
486224	Same, width 4 mm
486243	BEHRBOHM-WALTER Micro Osteotome , curved, extra delicate, with special double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

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RHP 33 C 107

Instruments for Nose and Rhinoplasty

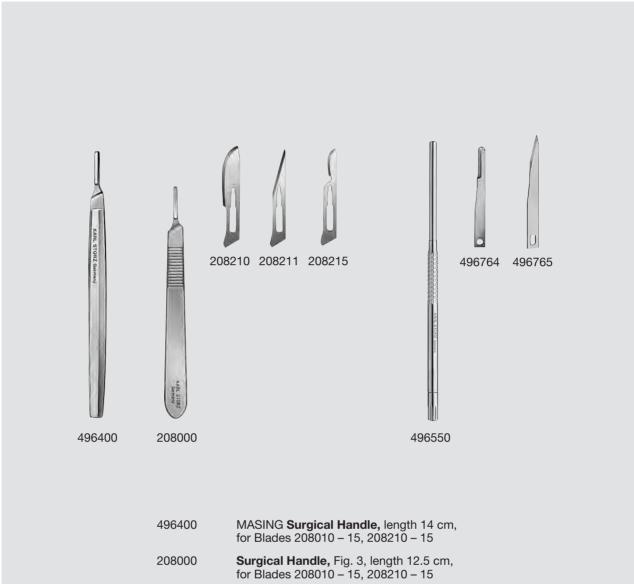




492900	FREER Nasal Knife, rounded edge, length 16.5 cm
493000	COTTLE Nasal Knife, rounded edge, length 14 cm
494500	JOSEPH Knife , curved, backward cutting, double beveled, length 15 cm
496800	Nasal Knife, curved, roundly tipped blade, width 4.5 mm, length 13.5 cm
496801	Same, straight
496900	MASING Nasal Knife , curved, roundly tipped blade, length 14 cm

Instruments for Nose and Rhinoplasty

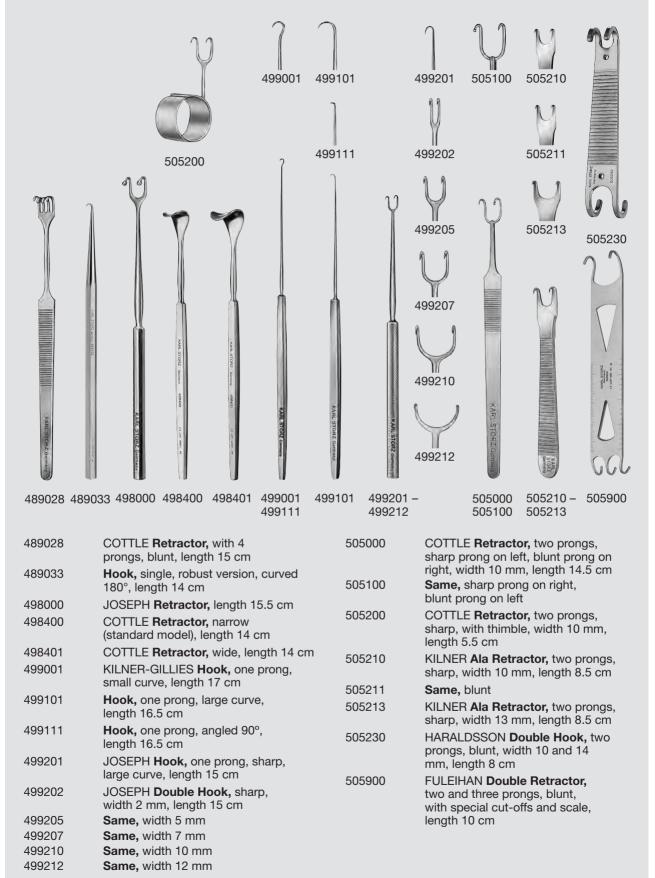




	490400	for Blades 208010 – 15, 208210 – 15
	208000	Surgical Handle, Fig. 3, length 12.5 cm, for Blades 208010 – 15, 208210 – 15
	208210 208211 208215	Blade, Fig. 10, sterile, package of 100 Same, Fig. 11 Same, Fig. 15
NEW	496550	Surgical Handle, for miniature blades, round, length 16.5 cm, for Blades $496764 - 65$
	496764 496765	Miniature Blade, Fig. 64, round, sterile, package of 24 Same, Fig. 65, pointed

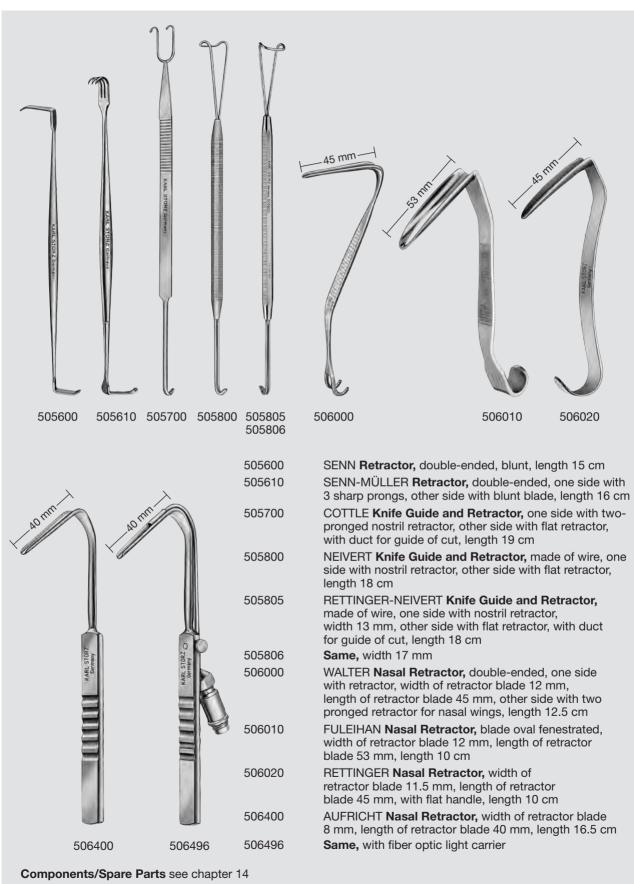
Instruments for Nose and Rhinoplasty





Instruments for Nose and Rhinoplasty





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RHP 37 C 111

Instruments for Nose and Rhinoplasty



"The Diamond Standard®" Scissors

Special Features:

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

Scissors with titanium nitride coating

Special Features:

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



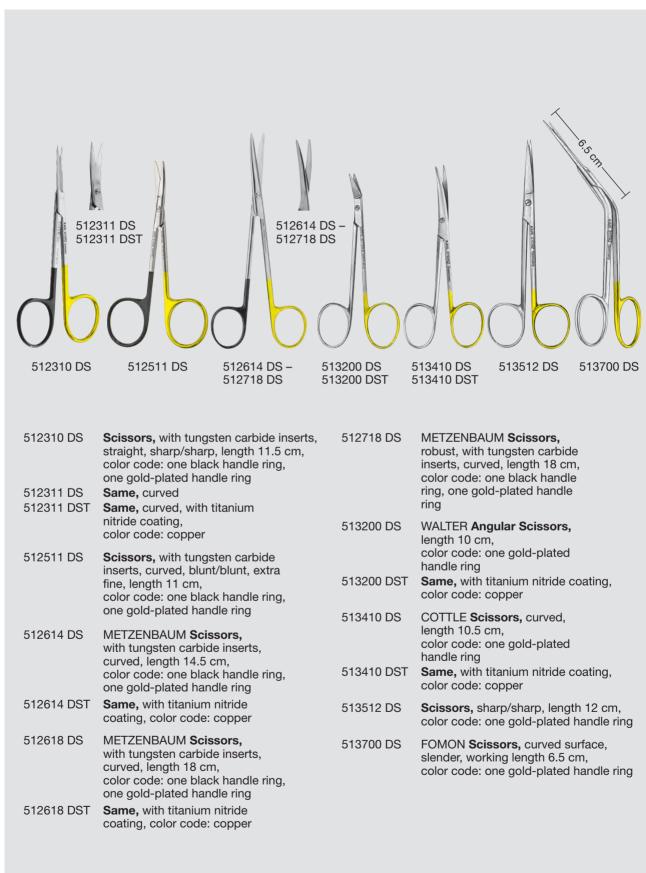
449002 DS	HEYMANN Nasal Scissors , medium size (standard model), working length 9.5 cm, color code: one gold-plated handle ring	511414 DS	JOSEPH Scissors , curved, length 14 cm, color code: one gold-plated
511010 DS	Scissors, extra delicate, straight, sharp/sharp, length 10.5 cm, color code: one gold-plated handle ring	511414 DST	handle ring Same, with titanium nitride coating, color code: copper
511010 DST	Same, with titanium nitride coating, color code: copper	511514 DS	METZENBAUM Scissors , curved, length 14.5 cm, color code: one gold-plated
511210 DS	Scissors, extra delicate, curved,		handle ring
	sharp/sharp, length 10.5 cm, color code: one gold-plated handle ring	511514 DST	Same, with titanium nitride coating, color code: copper
511210 DST	Same, with titanium nitride coating, color code: copper	511812 DST	KILNER Scissors , with tungsten carbide inserts, curved, flat end, with titanium nitride coating, length 12.5 cm

3-992

color code: copper

Instruments for Nose and Rhinoplasty

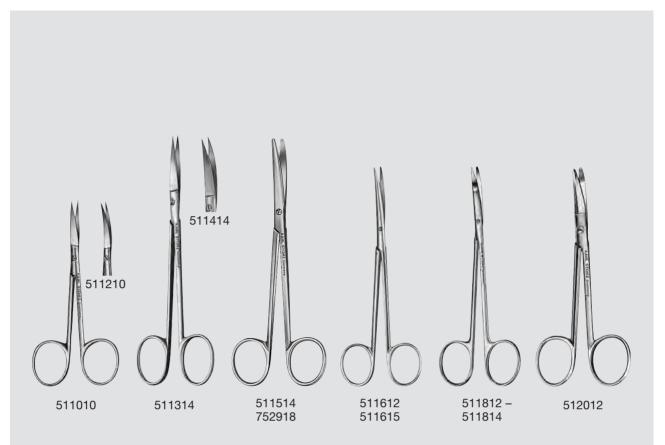




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RHP 39 C 113

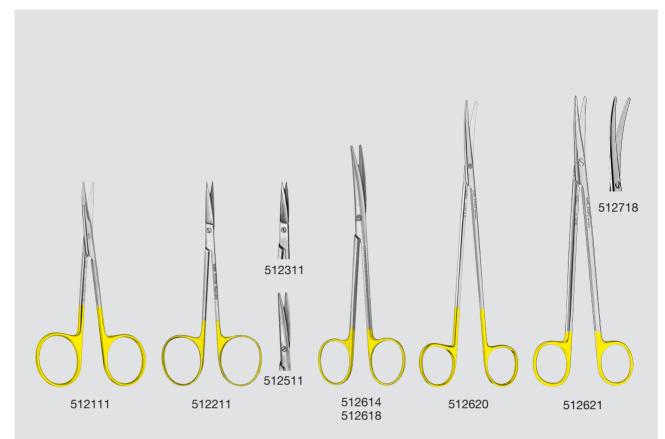




511010 511210	Scissors, extra delicate, straight, length 10 cm Same, curved
511314 511414	JOSEPH Scissors , straight, length 14 cm Same , curved
511514 752918	METZENBAUM Scissors , curved, length 14 cm Same , length 18 cm
511612 511615	METZENBAUM-LAHEY Scissors , curved, extra slender, length 12 cm Same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

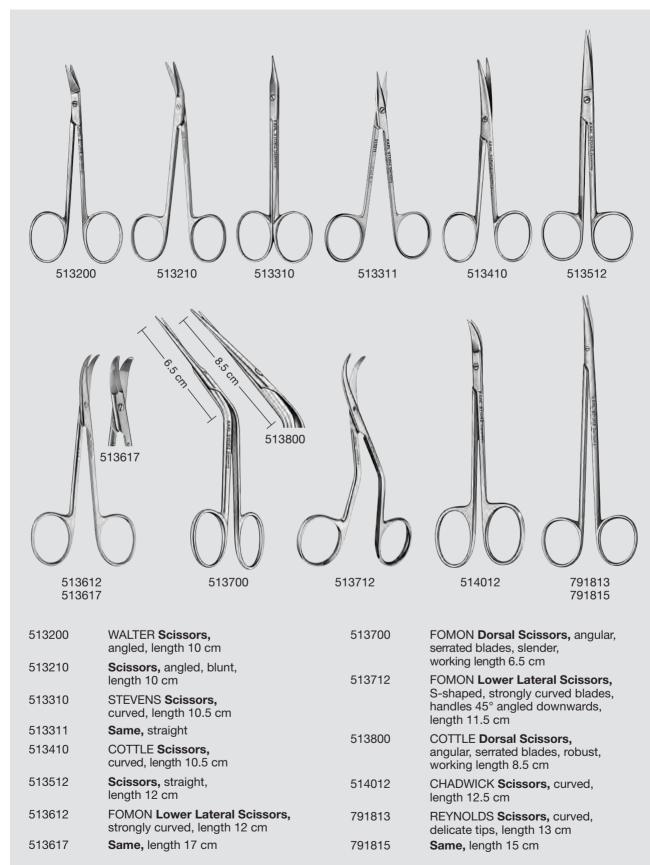
Instruments for Nose and Rhinoplasty





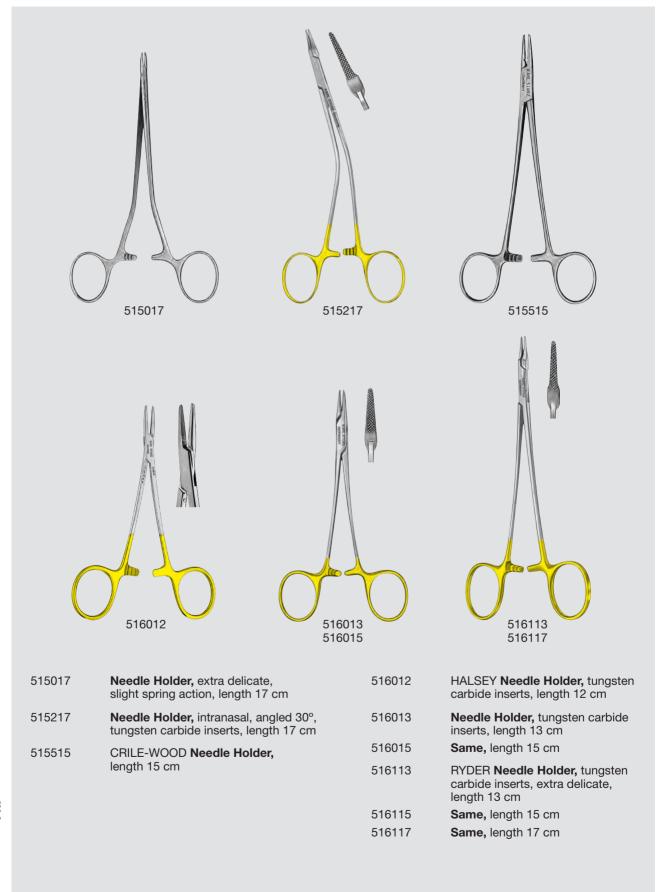
512111	Scissors, with tungsten carbide inserts, blunt/blunt, curved, double-edged grinding, semisharp outer edge for dissection, length 11.5 cm
512211	Scissors, with tungsten carbide inserts, straight, sharp/sharp, length 11 cm
512311	Same, curved
512511	Same, blunt/blunt, curved
512614	METZENBAUM Scissors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





Instruments for Nose and Rhinoplasty

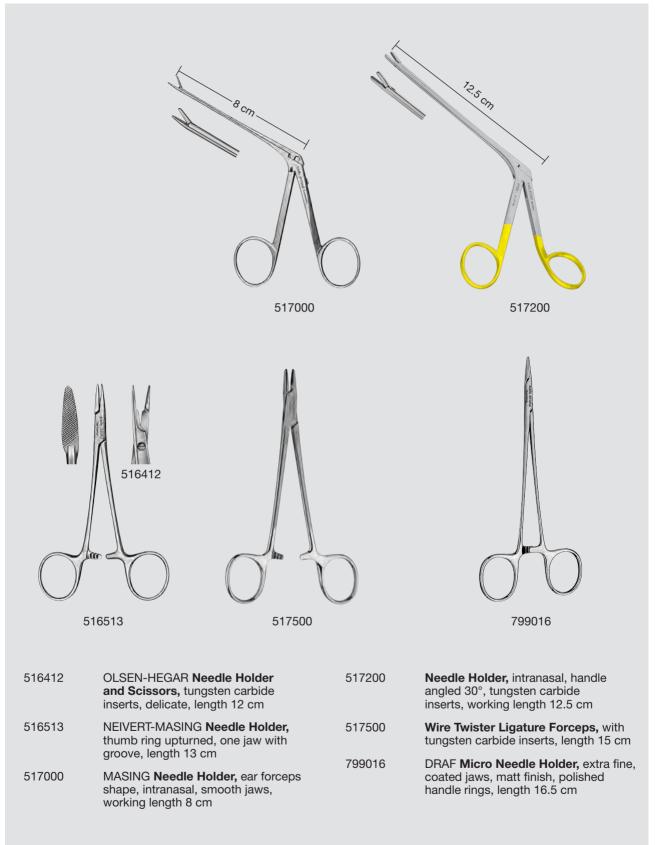




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RHP 43 B 117

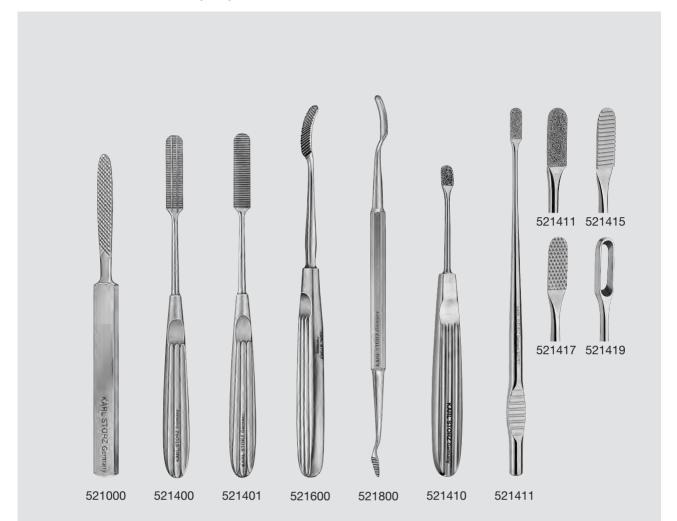
STORZ ENDOSKOPE



Instruments for Nose and Rhinoplasty



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

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RHP 45 B

Instruments for Nose and Rhinoplasty





	523000 523100	JOSEPH Nasal Saw, crosswise toothed, bayonet-shaped, right, length 18.5 cm Same, left
	523600 523700	Nasal Rasp, double-ended, fine, length 21.5 cm Same, coarse (rasp)
NEW	523800	Nasal Rasp, double-ended, with diamond coating, length 21.5 cm
	523812	Nasal Rasp, tungsten carbide, double-ended, rasp blades Fig. 1 and 2, coarse, length 20.5 cm
	523834	Same, rasp blades Fig. 3 and 4, coarse and medium
	523856	Same, rasp blades Fig. 5 and 6, medium
	523878	Same, rasp blades Fig. 7 and 8, medium and fine
	523891	Same, rasp blades Fig. 9 and 10, fine

Instruments for Nose and Rhinoplasty







	523900	COTTLE Bone Crusher , with clip, crusher size 5 x 1.5 cm
NEW	523905	Bone Crusher, large model, with clip, crusher size 5 x 3 cm
	523910	TOLSDORFF Bone and Cartilage Crusher, round, to press pieces of bone up to 4 cm evenly extended in all directions
	523920	RETTINGER-TOLSDORFF Same, with coarse surface
	523913	Metal Tray, for preparing cartilage and bone, with hole for towel forceps, size 10 x 15 cm
	524110	Nasal Splint, DENVER model, aluminium, padded, with self-adhesive underside, small, size 56 x 30 mm, package of 10
	524210	Same, medium, size 64 x 36 mm
	524310	Same, large, size 66 x 45 mm
	524302	Nasal Splint , aluminium, padded, with self-adhesive underside, large, with forehead extension, size 83 x 77 mm, package of 5

Components/Spare Parts see chapter 14

SCHMÄL CARTCUT® Cartilage Cutter



Special Features:

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



523950

523950

SCHMÄL CARTCUT® Cartilage Cutter,

for preparation of cartilage pieces

including:

Holding Device

Cleaning Adaptor

Holding-down Clamp

Knife, 1 mm

Knife, 2 mm



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



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



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





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



Fig. 6: The resulting cartilage.

Components/Spare Parts see chapter 14

For optimal storage and processing Tray 39502 ZH and Silicone Mat 39100 SH are recommended. Further accessories for Cleaning and Sterilization see catalog HYGIENE

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Instruments for Cartilage Removal



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539500 GIERTZ-STILLE **Rib Shears,** length 25 cm

539510 FERGUSON **Bone Holding Forceps,** width 12 mm,

length 20.5 cm

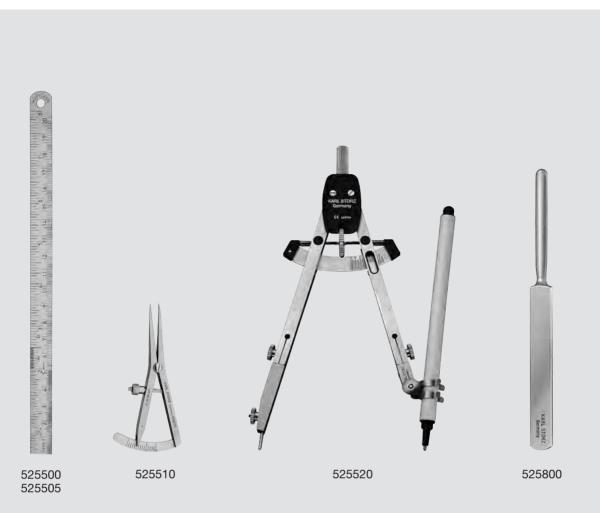
539520 DOYEN **Raspatory**, for adults, curved to right,

length 16.5 cm

539521 Same, curved to left

Instruments for Nose and Rhinoplasty





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

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

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

marker, autoclavable, length 18.5 cm

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

fractures, length 17 cm

Components/Spare Parts see chapter 14

Instruments for Nose and Rhinoplasty



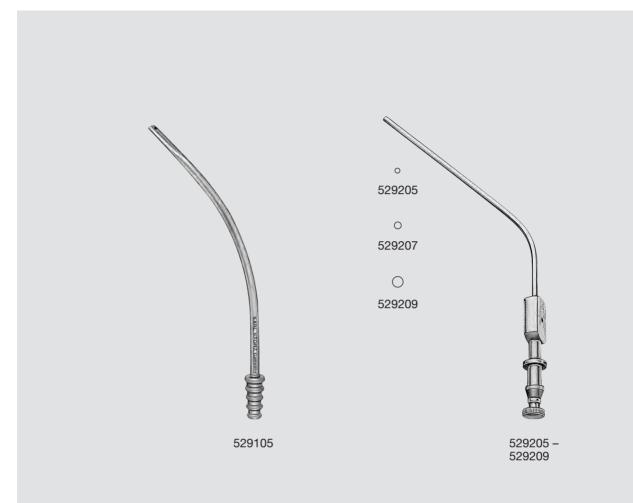


WALSHAM **Septum Straightening Forceps,** dismantling, length 21 cm 528800

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

Instruments for Nose and Rhinoplasty



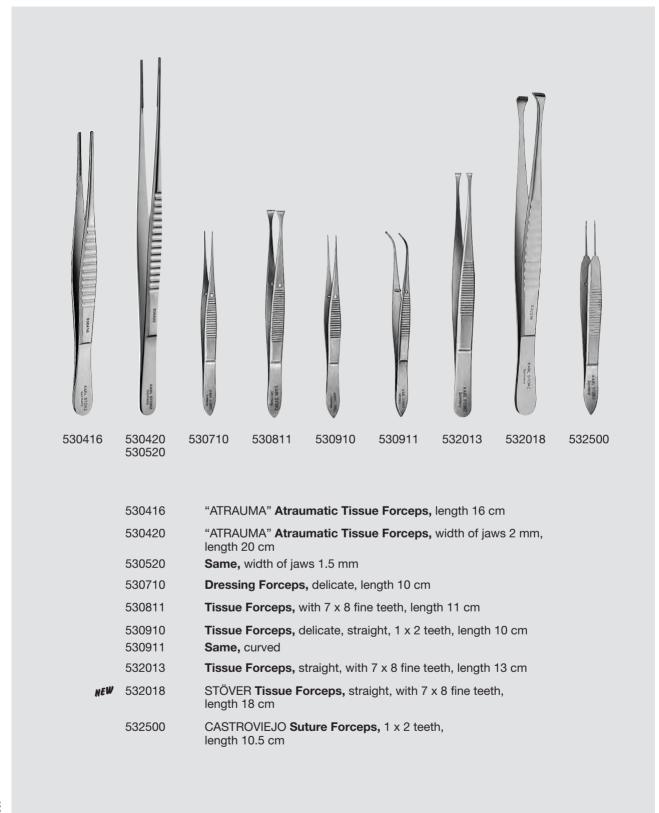


Suction Tube, curved, outer diameter 5 mm, length 16.5 cm
 FRAZIER Suction Tube, with cut-off hole and stylet, angled, outer diameter 5 Fr./1.5 mm, working length 10 cm, total length 17.5 cm
 Same, outer diameter 7 Fr./2 mm

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

Instruments for Nose and Rhinoplasty



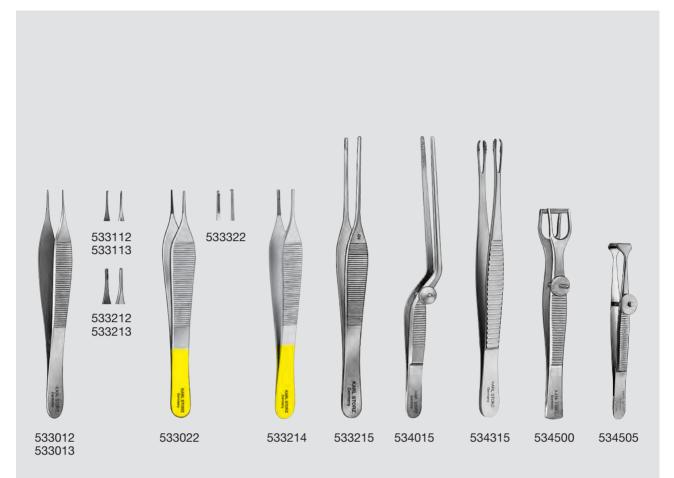


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RHP 53 127

Instruments for Nose and Rhinoplasty

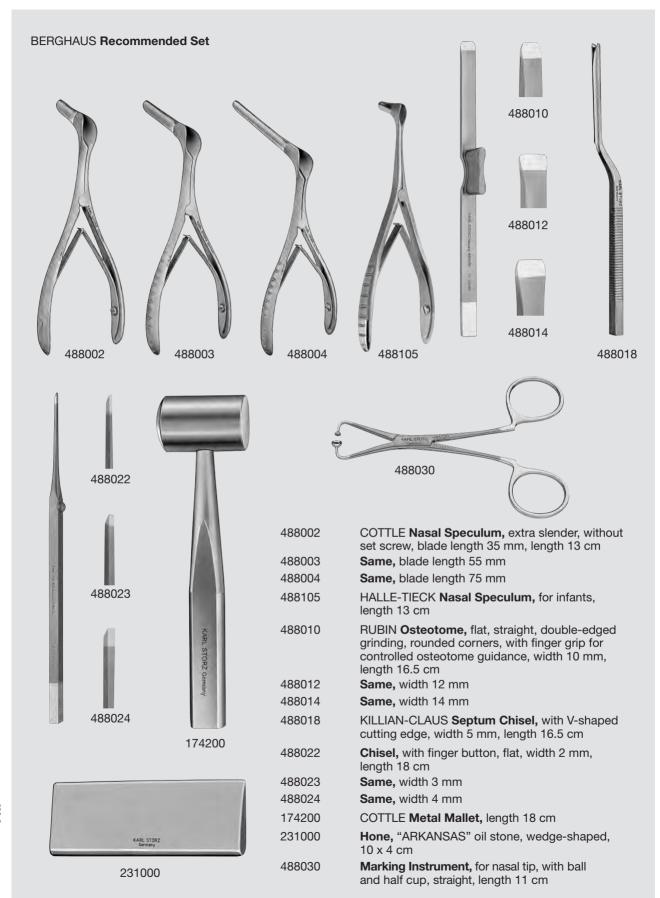




533012 533013	ADSON Dressing Forceps , serrated, length 12 cm Same , micro-model
533022	ADSON Dressing Forceps , serrated, tungsten carbide inserts, length 12 cm
533112	ADSON Tissue Forceps, 1 x 2 teeth, length 12 cm
533113	Same, micro-model
533212	ADSON-BROWN Tissue Forceps , atraumatic, fine side grasping teeth, length 12 cm
533213	Same, micro-model
533214	ADSON-BROWN Tissue Forceps , atraumatic, fine side grasping teeth, tungsten carbide inserts, width 1.5 mm, length 12 cm
533215	GLANZ Forceps, atraumatic, fine side grasping teeth, with extra long tips for better view and work in the depth, length 15 cm
533322	ADSON Tissue Forceps, serrated, 1 x 2 teeth, tungsten carbide inserts, length 12 cm
534015	COTTLE Lower Lateral Forceps, bayonet-shaped, with set screw, serrated tips and teeth on the inside, length 15 cm
534315	FULEIHAN Forceps , with teeth and open window, width 5 mm, length 15 cm
534500	COTTLE Columella Clamp, length 11 cm
534505	Columella Clamp, for children, width 7.5 mm, length 8.5 cm

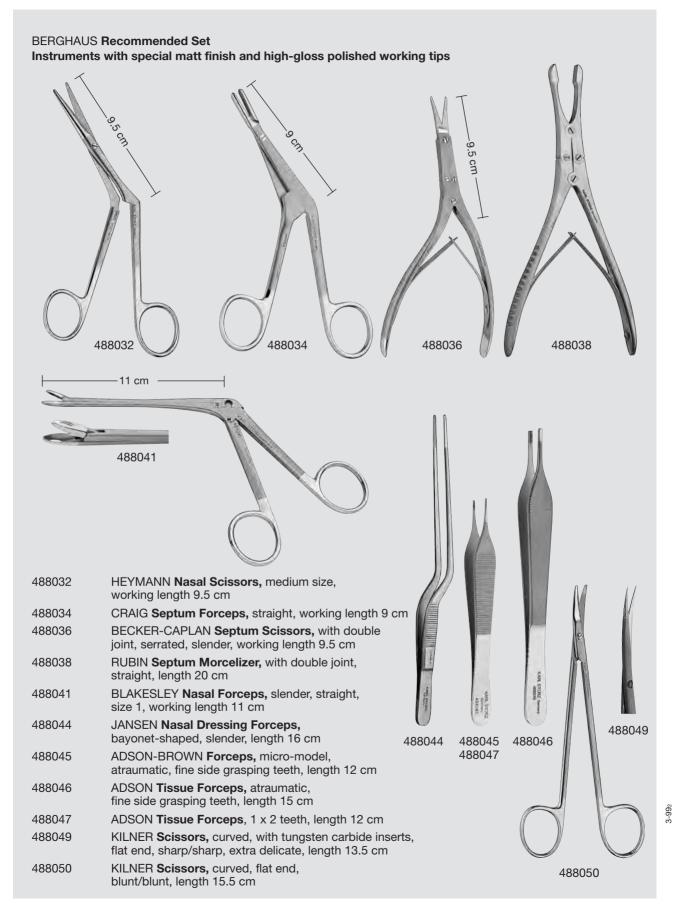
Rhinoplasty - Aesthetic-Plastic Surgery of the Nose





Rhinoplasty - Aesthetic-Plastic Surgery of the Nose





Rhinoplasty - Aesthetic-Plastic Surgery of the Nose



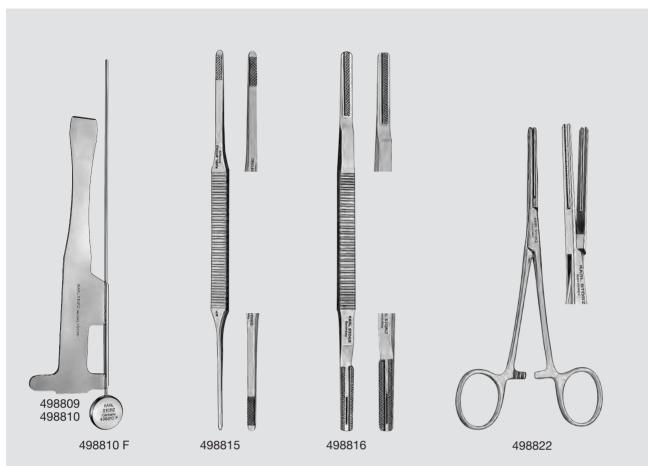


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RHP 57 A 131

Instruments for Rhinoplasty



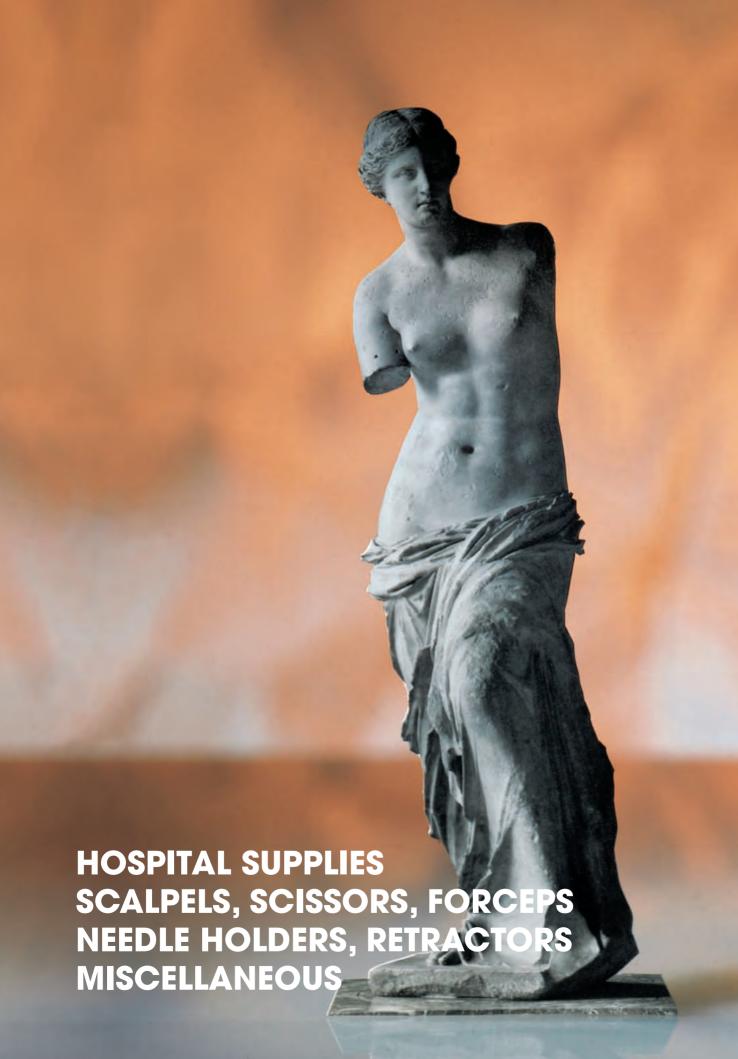




498820

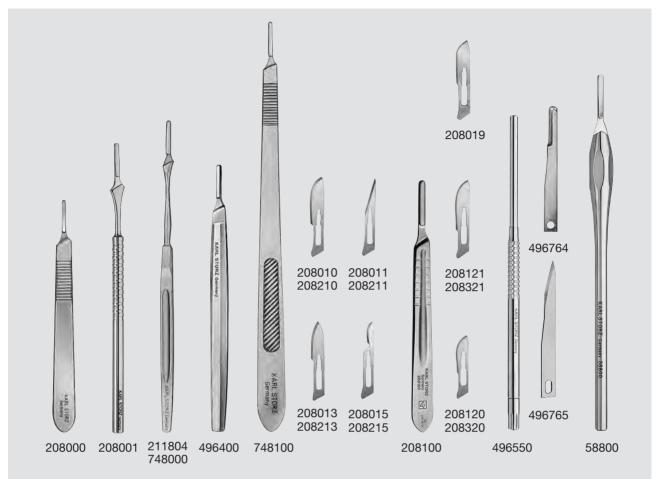


498809 498810	AIACH Osteotome for Hump Removal, with lateral guiding rod, width 10 mm Same, width 13 mm
498810 F	Guide Rod, for 498809 and 498810, only
498815	AIACH Narrow Rasp, double-ended, medium, width 5 and 3 mm, length 20 cm
498816	AIACH Tenon Mortise Rasp, double-ended, medium, one side with augmented teeth, other side slotted without teeth, length 20 cm
498820	AIACH Grid, for preparation of cartilage, graduated, size 90 x 50 mm
498822	AIACH Cartilage Graft Forceps, for grasping and preparation of cartilage, with slotted jaws, length 15 cm
498824	AIACH Cartilage Crusher , crusher size 5 x 1.5 cm



Scalpels and Handles





208	3000	Surgical Handle, Fig. 3, length 12.5 cm, for Blades 208010 – 15, 208210 – 15 Round Surgical Handle, Fig. 3, length 15 cm, for Blades 208010 – 15, 208210 – 15 FISCH Dual Purpose Scalpel Handle, elevator on one side, scalpel handle		208100	Surgical Handle, Fig. 4, length 13.5 cm, for Blades 208019, 208120 – 21, 208320 – 21
208	3001			208120	Blade, for Handle 208100, Fig. 20, non-sterile,
211	1804			208121	package of 100 Same, Fig. 21
		no. 7 on the other side, length 16 cm		208019	Blade, Fig. 19, sterile, package of 100
496400		MASING Surgical Handle, length 14 cm,			
- 46		for Blades 208010 – 15, 208210 – 15		208320	Blade, for Handle 208100, Fig. 20, sterile, package of 100
748	3000	Surgical Handle, Fig. 7, length 16.5 cr for Blades 208010 – 15, 208210 – 15		208321	Same, Fig. 21
748	3100	Surgical Handle, Fig. 3L, length 21 cm, for Blades 208010 – 15, 208210 – 15	NEW	496550	Surgical Handle, for miniature blades, round, length 16.5 cm, for Blades 496764 – 65
208	3010	Blade, Fig. 10, non-sterile, package of 100		496764	Miniature Blade, Fig. 64, round,
	3011	Same, Fig. 11		496765	sterile, package of 24 Same, Fig. 65, pointed
	3013 3015	Same, Fig. 13 Same, Fig. 15	NEW	58800	Surgical Handle, straight,
		, 9	HEM	30000	length 14 cm, for Blades
208210		Blade, Fig. 10, sterile, package of 100		E0004	208010 – 15, 208210 – 15
208	3211	Same, Fig. 11		58801	Same, angled
	3213	Same, Fig. 13			
208	3215	Same, Fig. 15			

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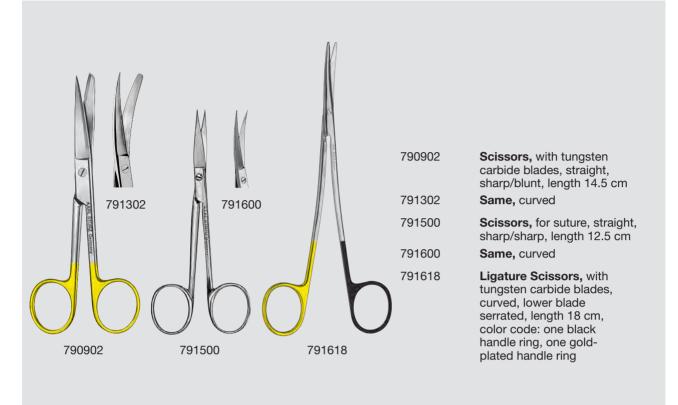


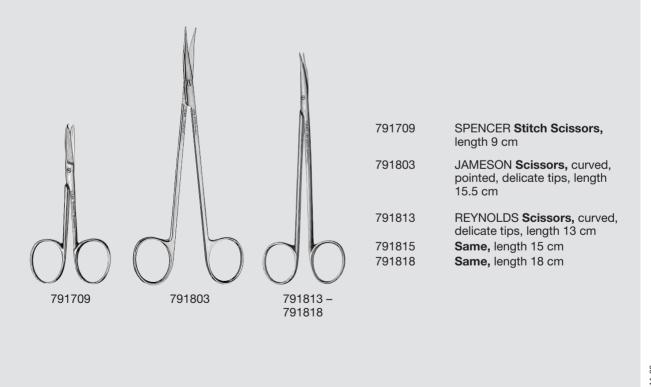
791001 Scissors, curved, sharp/sharp, length 13 cm
791002 Same, sharp/blunt
791003 Same, blunt/blunt

791201 Scissors, curved, sharp/sharp, length 14.5 cm
791202 Same, sharp/blunt
791203 Same, blunt/blunt

Scissors



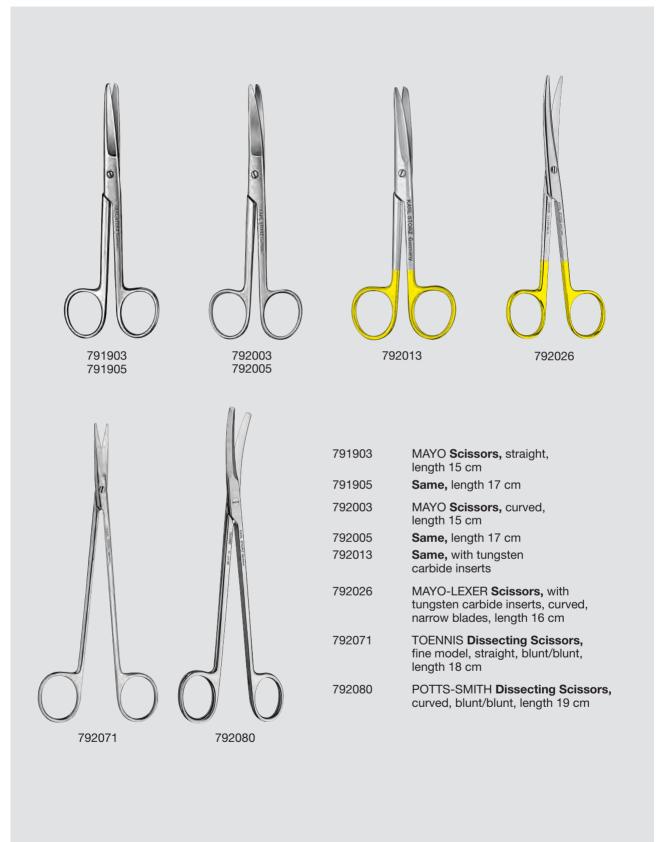




136 HS 2 B

Scissors





11-03

HS 3 D 137



"The Diamond Standard®" Scissors

Special Features:

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

Scissors with titanium nitride coating

Special Features:

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



790802 DS **Scissors,** straight, sharp/blunt,

length 14.5 cm,

color code: one gold-plated handle ring

790902 DS **Scissors**, with tungsten carbide inserts,

straight, sharp/blunt, length 14.5 cm, color code: one black handle ring, one gold-plated handle ring

791002 DS Scissors, curved, sharp/blunt,

length 13 cm,

color code: one gold-plated handle ring

791003 DS Same, blunt/blunt

791003 DST Same, with titanium-nitride

coating,

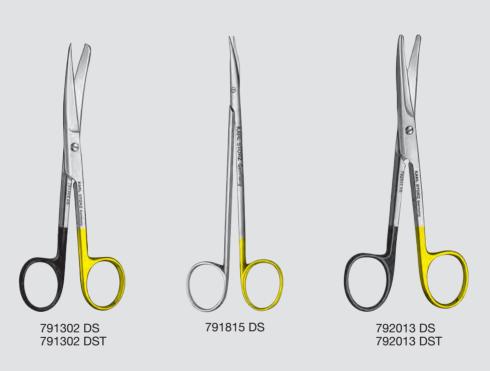
color code: copper

791202 DS Scissors, curved, sharp/blunt,

length 14.5 cm,

color code: one gold-plated handle ring





791302 DS **Scissors,** with tungsten carbide inserts, curved, sharp/blunt, length 14.5 cm,

curved, sharp/blunt, length 14.5 cm, color code: one black handle ring, one gold-plated handle ring

791302 DST **Same,** with titanium-nitride coating,

color code: copper

791815 DS REYNOLDS Dissecting Scissors,

curved, small tips, length 15 cm, color code: one gold-plated handle ring

792013 DS MAYO **Dissecting Scissors**, with tungsten

carbide inserts, curved, length 15 cm, color code: one black handle ring, one gold-plated handle ring

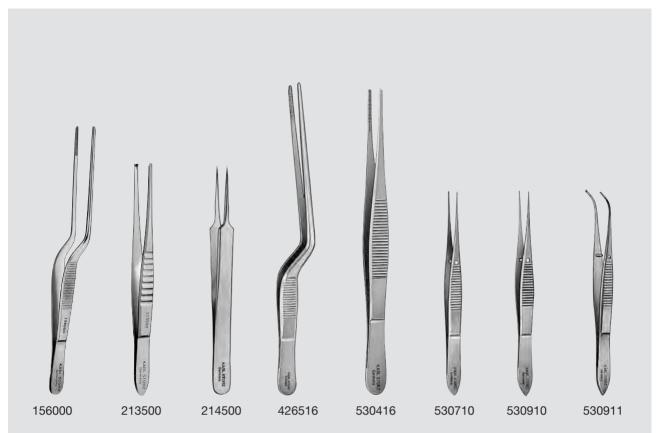
792013 DST **Same,** with titanium-nitride

coating, length 14.5 cm, color code: copper

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HS 5 D 139

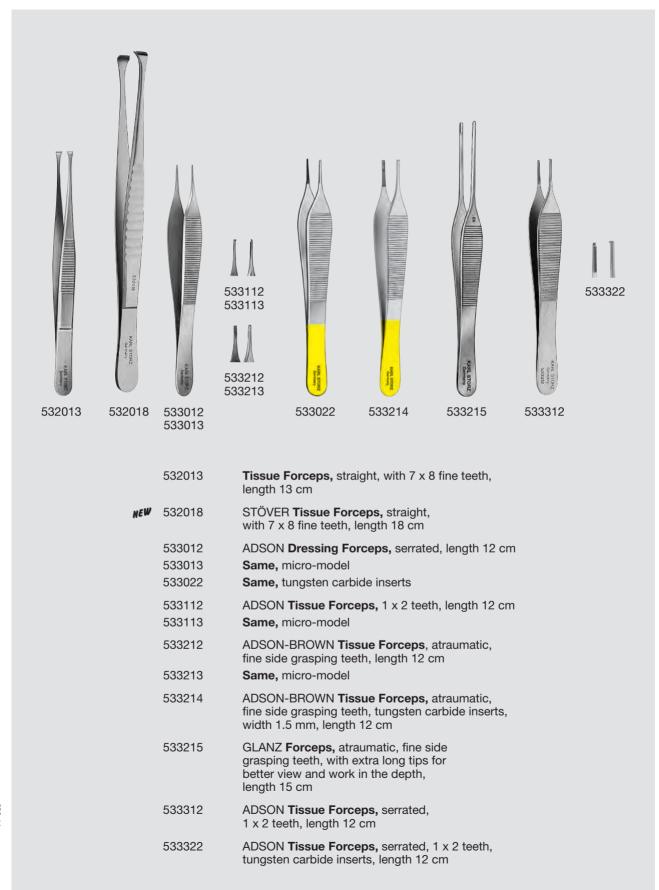




156000	LUCAE Ear Forceps, bayonet-shaped, length 14.5 cm
213500	Tissue Forceps, 1 x 2 teeth, length 11.5 cm
214500	Jeweler Forceps, fine, pointed, length 11 cm
426516	JANSEN Nasal Dressing Forceps, bayonet-shaped, length 16.5 cm
530416	"ATRAUMA" Atraumatic Tissue Forceps, length 16 cm
530710	Dressing Forceps, delicate, length 10 cm
530910	Tissue Forceps, delicate, straight, 1 x 2 teeth, length 10 cm
530911	Same, curved

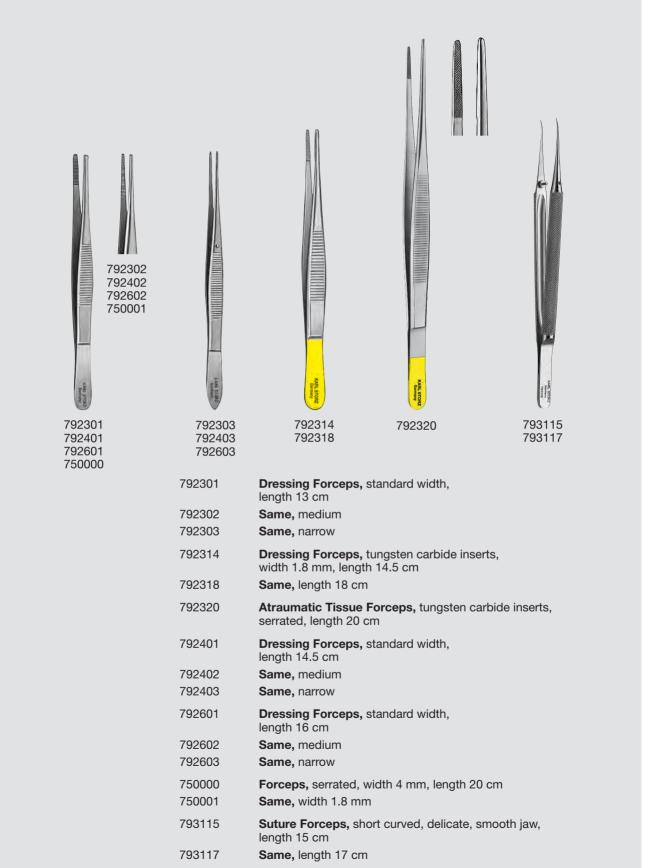






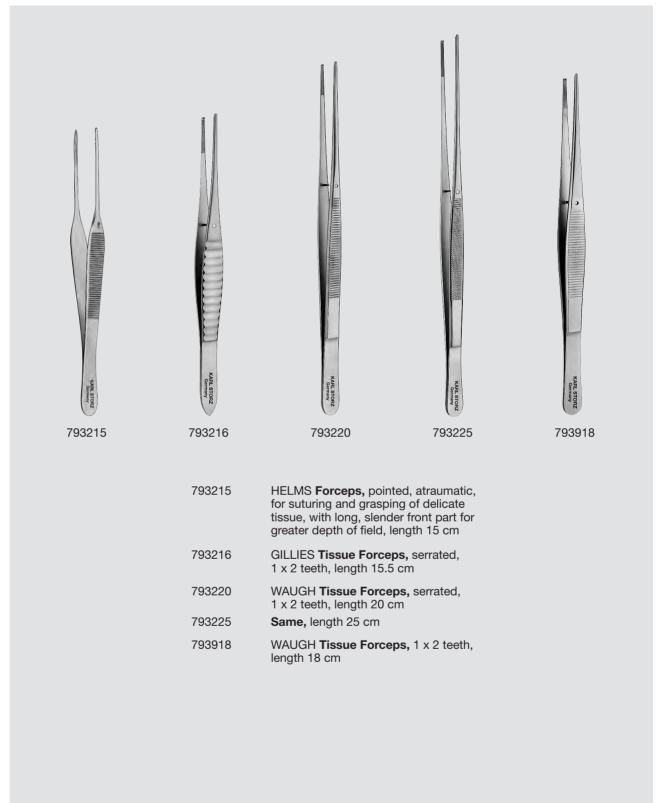
HS 7 D 141



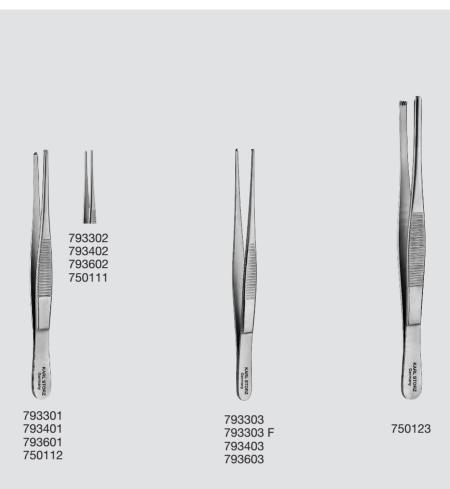






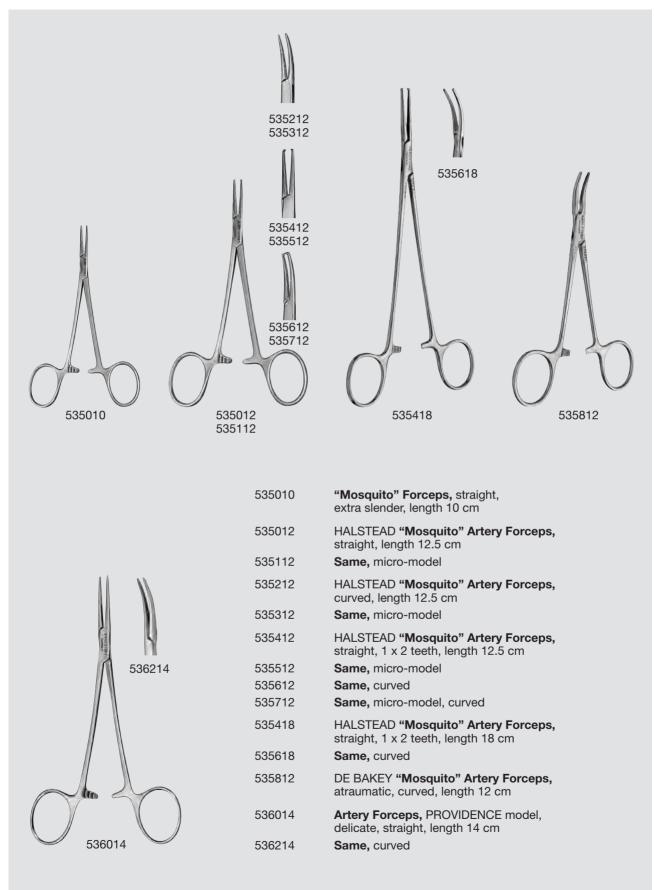






793301	Tissue Forceps, 1 x 2 teeth, standard width, length 13 cm
793302	Same, medium
793303	Same, narrow
793303 F	Same, slender, soft spring
793401	Tissue Forceps, 1 x 2 teeth, standard width, length 14.5 cm
793402	Same, medium
793403	Same, narrow
793601	Tissue Forceps, 1 x 2 teeth, standard width, length 16 cm
793602	Same, medium
793603	Same, narrow
750111	Tissue Forceps, 1 x 2 teeth, width 2 mm, length 20 cm
750112	Same, width 3.5 mm
750123	Tissue Forceps, 2 x 3 teeth, width 4.5 mm, length 20 cm
750134	Tissue Forceps, 3 x 4 teeth, width 5.5 mm, length 20 cm

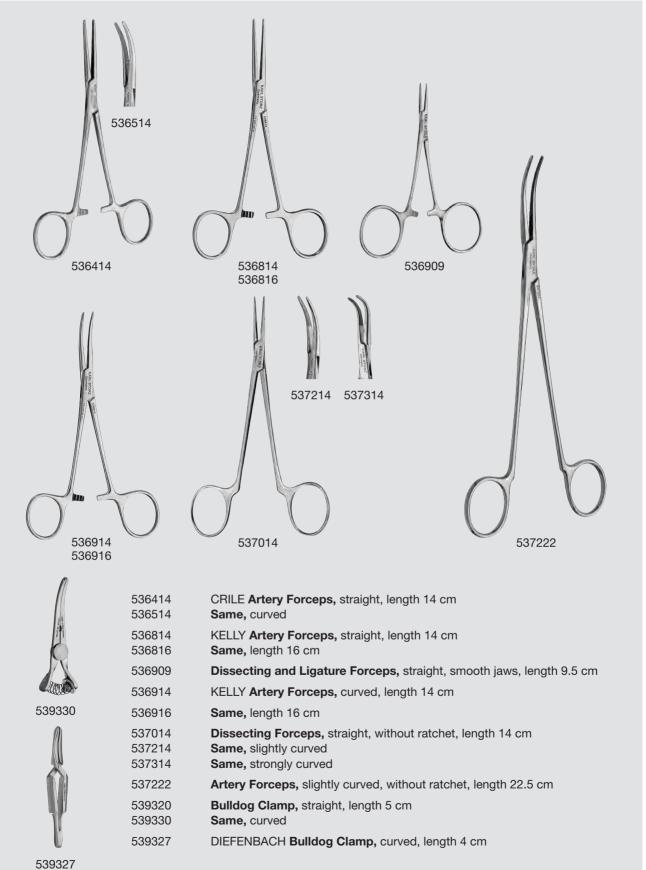




1-914

HS 11 D 145



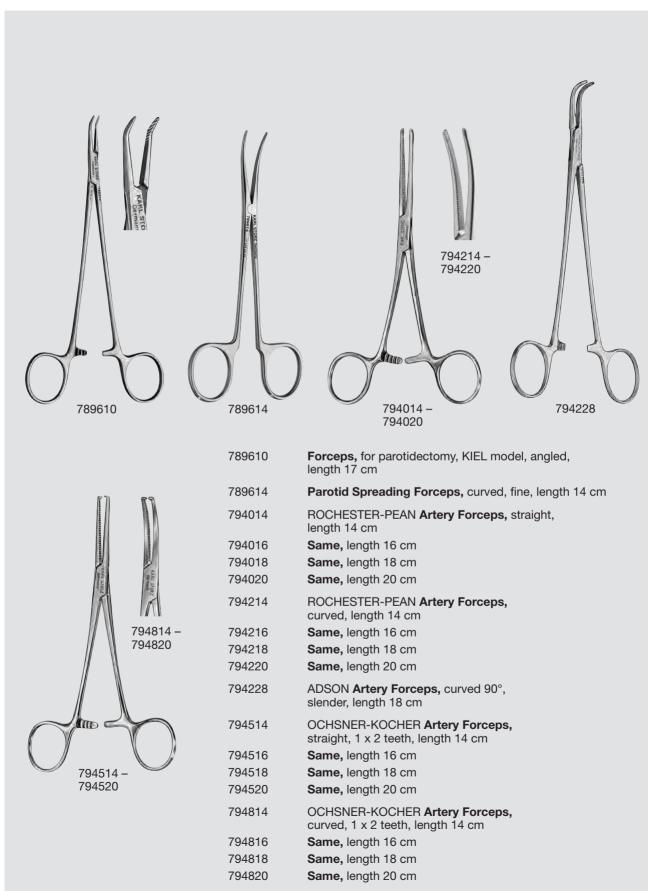


146 HS 12 D

6



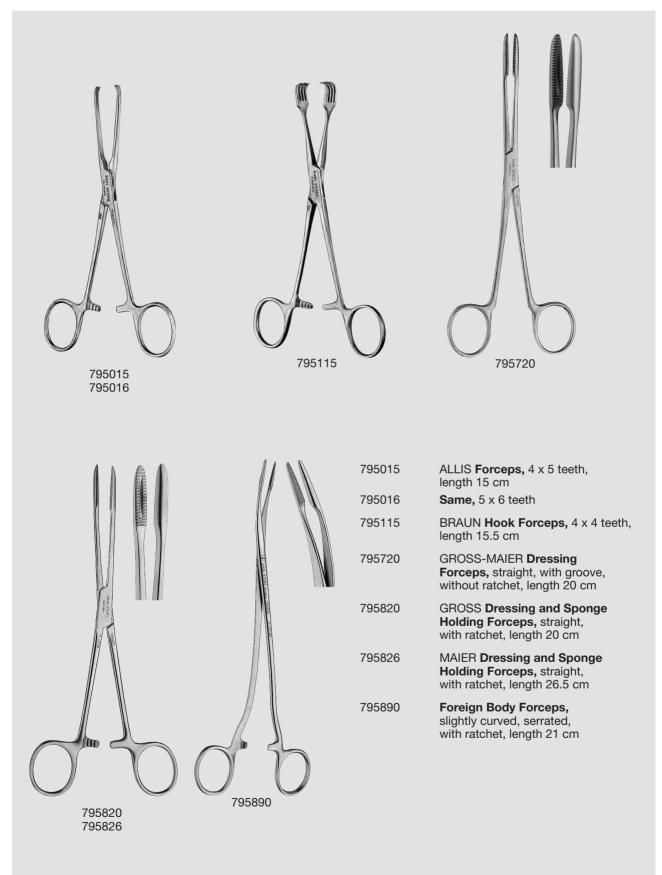




1-913

HS 13 D 147





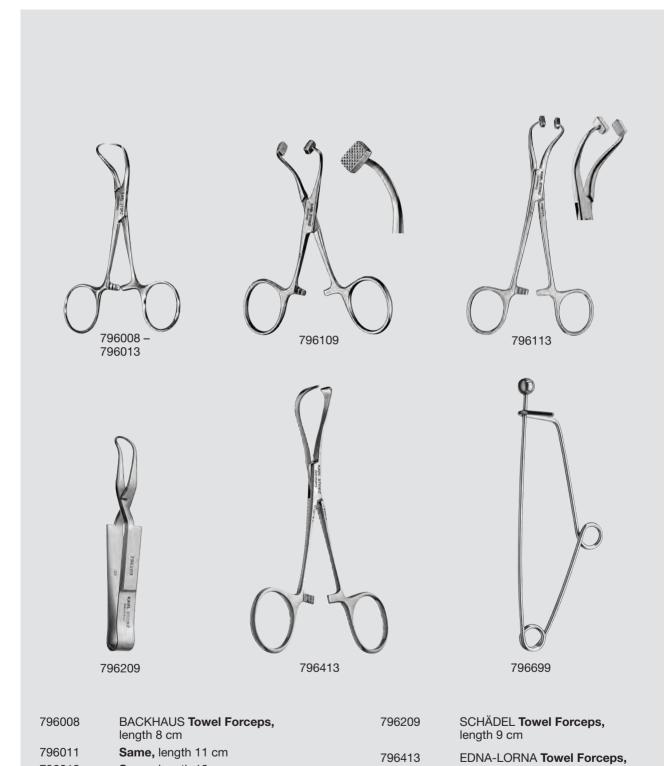
148 HS 14 D





serrated, non-perforating, length 13 cm

Safety Pin, for holding ring handle instruments, length 14 cm



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796013

796109

796113

Same, length 13 cm

Towel Forceps, with serrated inserts, length 9.5 cm, for paper cover sheets

Towel Forceps, with serrated inserts, length 13 cm, for paper cover sheets

HS 15 D 149

796699

Needle Holders

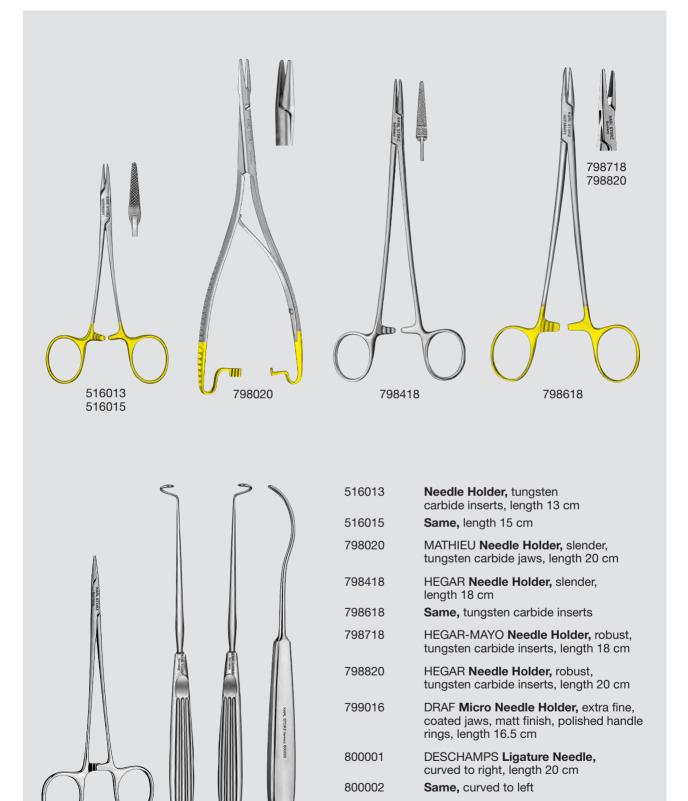
799016

800001

800002

800005





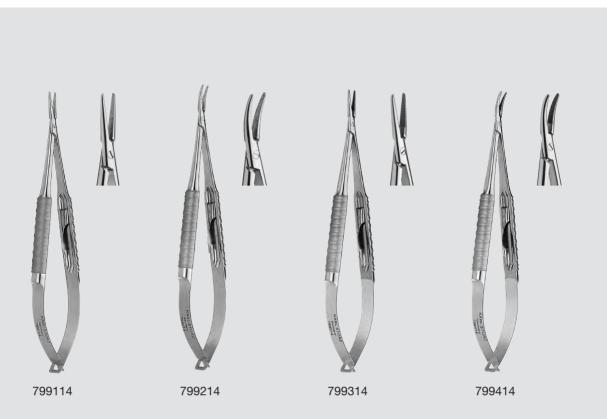
φ

800005

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

BARRAQUER Micro Needle Holder





799114	BARRAQUER Micro Needle Holder, with round spring handle, straight, smooth-coated jaws, with ratchet, length 14 cm
799116	Same, length 16 cm
799118	Same, length 18 cm
799214	BARRAQUER Micro Needle Holder, with round spring handle, curved, smooth-coated jaws, with ratchet, length 14 cm
799216	Same, length 16 cm
799218	Same, length 18 cm
799314	BARRAQUER Micro Needle Holder, with round spring handle, straight, serrated, tungsten carbide jaws, with ratchet, length 14 cm
799316	Same, length 16 cm
799318	Same, length 18 cm
799414	BARRAQUER Micro Needle Holder, with round spring handle, curved, serrated, tungsten carbide jaws, with ratchet, length 14 cm
799416	Same, length 16 cm

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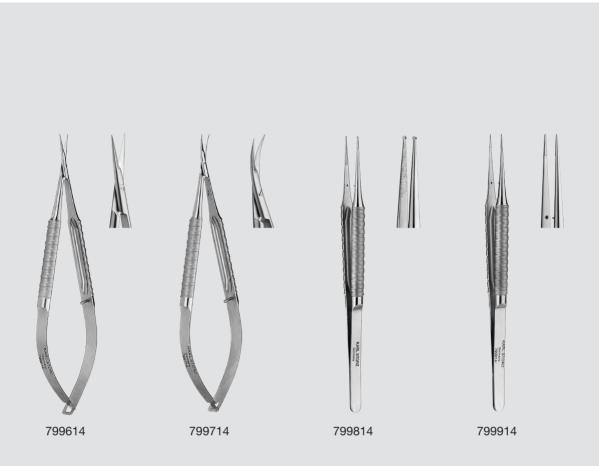
HS 17 E 151

Same, length 18 cm

799418

Micro Instruments

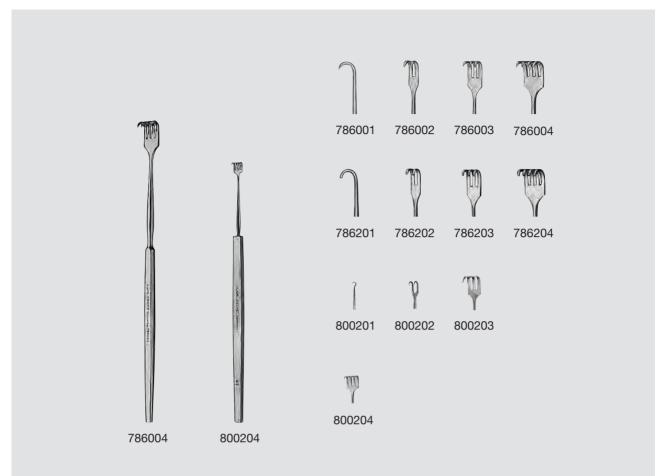




799614	Micro Scissors, with round spring handle, straight, serrated cutting edge, length 14 cm
799616	Same, length 16 cm
799618	Same, length 18 cm
799714	Micro Scissors, with round spring handle, curved, serrated cutting edge, length 14 cm
799716	Same, length 16 cm
799718	Same, length 18 cm
799814	Micro Ring Forceps, with round spring handle, straight, coated, length 14 cm
799814 799816	• • • • • • • • • • • • • • • • • • • •
	straight, coated, length 14 cm
799816	straight, coated, length 14 cm Same, length 16 cm
799816 799818	straight, coated, length 14 cm Same, length 16 cm Same, length 18 cm Micro Forceps, with round spring handle,
799816 799818 799914	straight, coated, length 14 cm Same, length 16 cm Same, length 18 cm Micro Forceps, with round spring handle, straight, coated, length 14 cm







786001	Retractor, sharp, 1 prong, length 17 cm
786002 786003	Same, 2 prongs Same, 3 prongs
786004	Same, 4 prongs
786201	Retractor, blunt, 1 prong, length 17 cm
786202	Same, 2 prongs
786203	Same, 3 prongs
786204	Same, 4 prongs
800201	Retractor, extra fine, sharp, 1 prong, length 12 cm
800202	Same, 2 prongs
800203	Retractor, extra fine, sharp, 3 prongs, length 13 cm
800204	Retractor, extra fine, sharp, 4 prongs, length 13 cm

3-99

HS 19 D 153





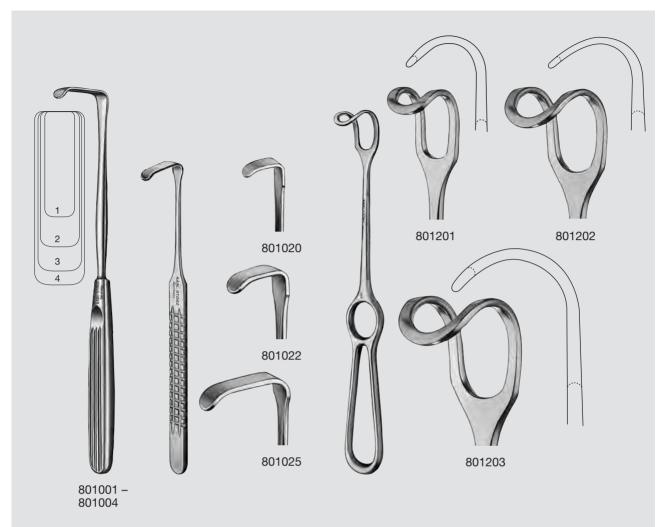
800401	VOLKMANN Retractor, sharp, 1 prong, length 21 cm	800422	VOLKMANN Retractor, semisharp, 2 prongs,
800402	Same, 2 prongs		size 8.5 x 8 mm, length 22 cm
800403	Same, 3 prongs	800424	VOLKMANN Retractor,
800404	Same, 4 prongs		semisharp, 4 prongs,
800406	Same, 6 prongs	000400	length 21 cm
800408	VOLKMANN Retractor , sharp,	800426	Same, 6 prongs
000400	8 prongs, length 22 cm	800501	VOLKMANN Retractor, blunt, 1 prong, length 21 cm
800411	VOLKMANN Retractor , sharp,	800502	Same, 2 prongs
	1 prong, long curve for cheekbone, length 21 cm	800503	Same, 3 prongs
		800504	Same, 4 prongs
		800506	Same, 6 prongs

-993

154 HS 20 E







801001	LANGENBECK Retractor, size 1, 25 x 7.5 mm, length 22 cm	801201	MIDDELDORPF Retractor , with grid handle, small, size 1,
801002	Same, size 2, 31 x 9 mm		15 x 15 mm, length 20 cm
801003	Same, size 3, 37 x 10.5 mm	801202	Same, medium, size 2, 20 x 20 mm
801004	Same, size 4, 40 x 12 mm	004000	
801020	LANGENBECK-GREEN Retractor, with flat handle, 10 x 4 mm, length 16 cm	801203	Same, large, size 3, 28 x 28 mm

Same, 16 x 6 mm

Same, 24 x 6 mm

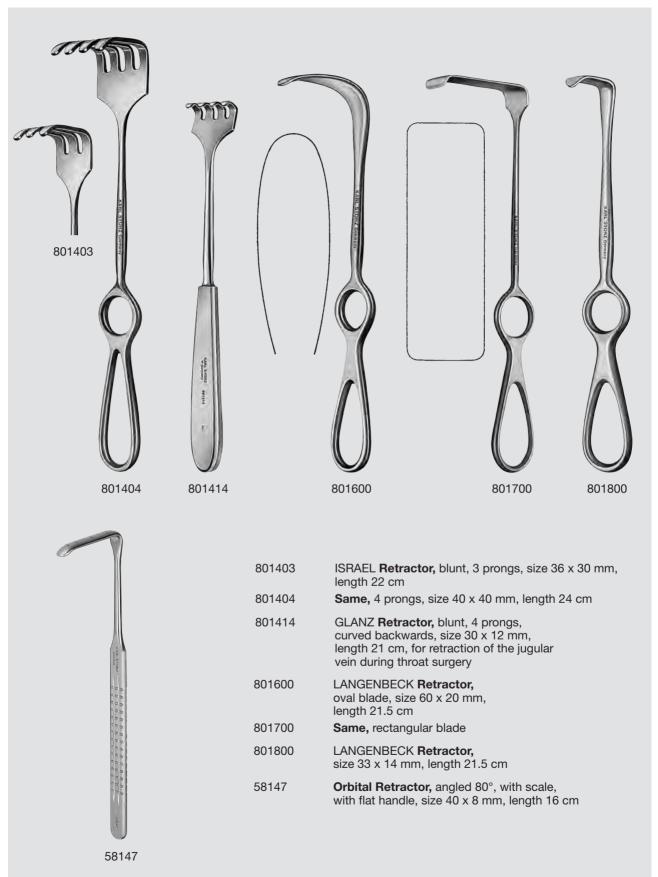
3-993

801022

801025

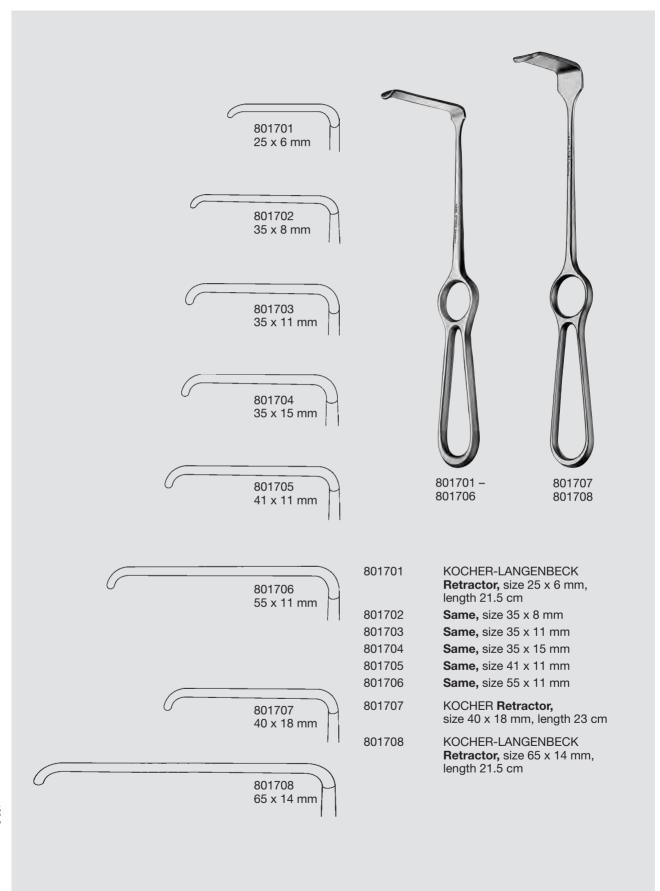
HS 21 D 155





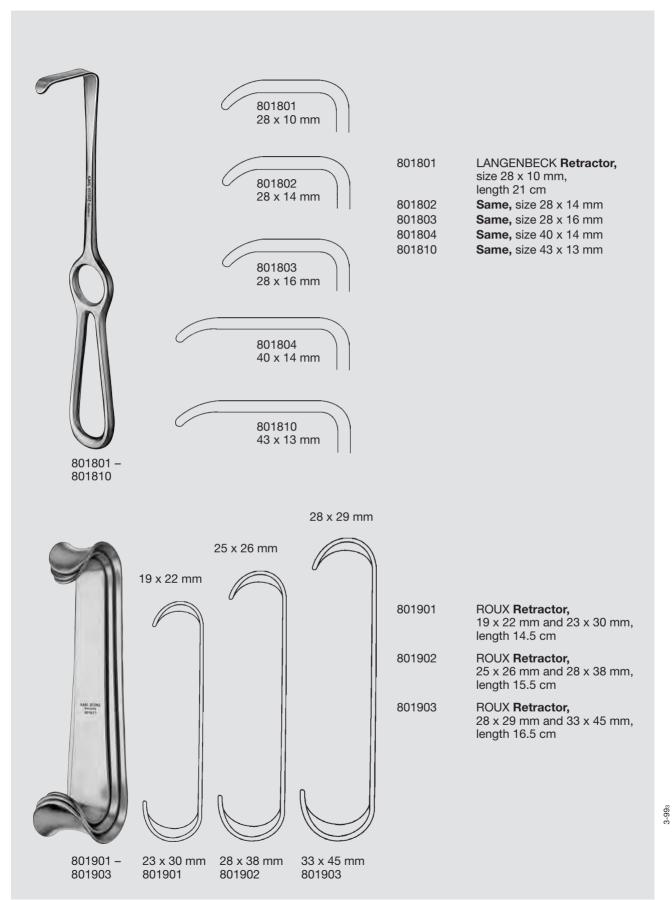
156 HS 22 A





HS 23 A 157

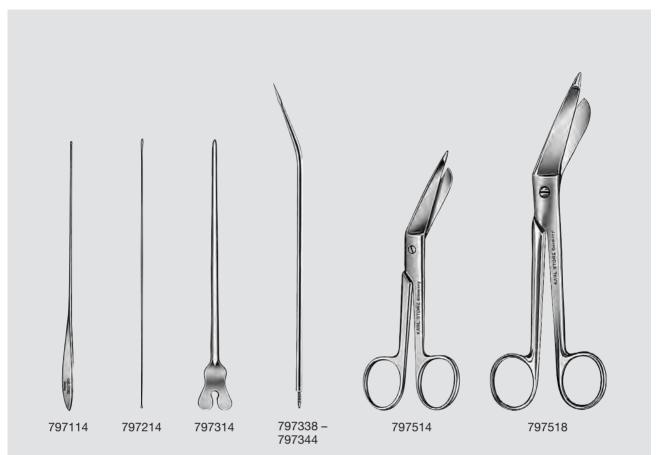




158 HS 24 A







797114	myrtie Leaf Probe, diameter 1.5 mm, length 14.5 cm
797214	Bulbous Probe, diameter 1.5 mm, length 14.5 cm
797314	Grooved Director, length 14.5 cm
797338	Redon Guide Needle, angled, with lancet tip, 8 Fr.
797340	Same, 10 Fr.
797342	Same, 12 Fr.
797344	Same, 14 Fr.
797514	LISTER Bandage Scissors, length 14 cm
797518	Same, length 18 cm

3-99

HS 25 A 159

Holders for Endoscopes and Suction Tubes



Special Features:

- Secure, defined resting place during surgical interventions
- Time-saving due to continuous access to endoscopes/suction holders in specific, fixed position
- In ideal cases allows surgeons independent access to instruments
- Holders can be easily mounted to an instrument side-table



8997 E **Endoscope Holder,** for mounting to the instrument table, for secure and optimized storage of endoscopes up to diameter 5 mm

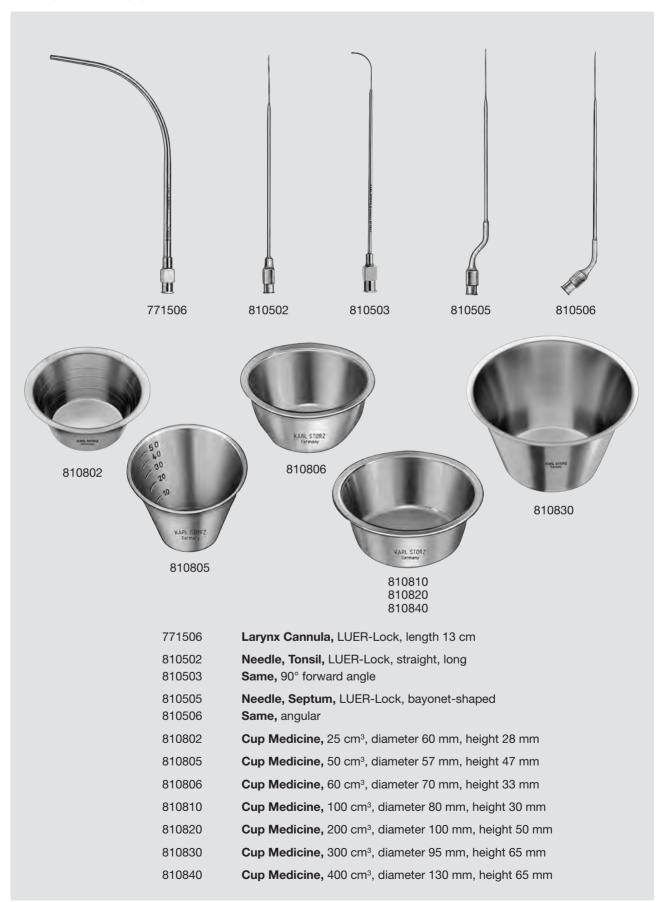
8997 K **Suction Tube Holder,** for mounting to the instrument table, for secure and optimized

storage of suction tubes



Hospital Supplies



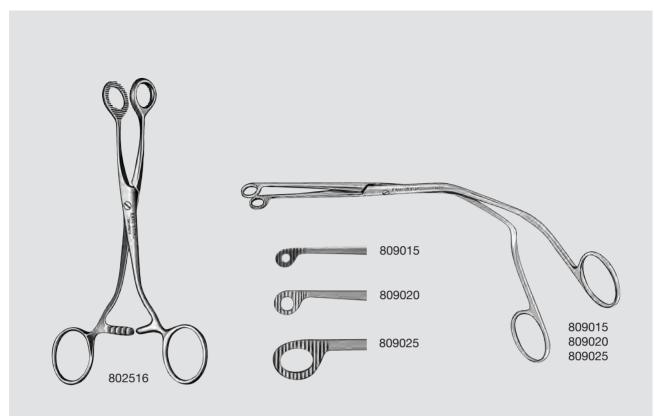


3-992

HS 27 161







802516	COLLIN Tongue Seizing Forceps, length 16 cm
809015	MAGILL Forceps, for the introduction of endo-tracheal tubes, for infants and small children, length 15 cm
809020	Same, for children, length 20 cm
809025	Same, for adults, length 25 cm







810803	Cup Medicine, stainless steel, diameter 65 mm, height 20 mm
810850	Cup Medicine, with handle, 350 cm ³ , diameter 70 mm, height 90 mm
815200	Jar, stainless steel, diameter 5 cm, height 17.5 cm
815213	Same, height 13 cm
815500	Lamp, Alcohol, glass, with lateral changing hole, 150 cm ³
820517	Kidney-Shaped Dressing Tray, stainless steel, length 17 cm
820525	Same, length 25 cm
820527	Same, length 27.5 cm

BEHRBOHM/LEITHÄUSER ENT Basic

Examination Set



Special Features:

Enables basic ENT examinations and function tests

 All instruments are stored securely in a special leather pouch



826201 **ENT Diagnosis Set,** for outpatient basic ENT treatments including:

Leather Bag for ENT Diagnosis Set, with divided main compartment and 2 detachable side pockets

Nystagmus Spectacles, small model without illumination **LED Penlight,** burning time approx. 50 hours in continuous operation with 2 Micro-AAA batteries (included)

Tuning Fork, A1-440, with stand, small model

Tongue Depressor, wooden, width 19 mm, length 16 cm, package of 100





1216 AA **HOPKINS® Straight Forward Telescope 0°,** for oto-nasopharyngoscopy, diameter 4 mm, length 11 cm, **autoclavable**, fiber optic light transmission incorporated,

color code: green

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

thread, brightness > 110 lm / > 150 klx, burning time > 120 min, weight approx. 150 g ready for use, **suitable for wipe**

disinfection, with 2 Photo Batteries 121306 P

121300 HEINE **Otoscope**, otoscope head with fiber optic light

transmission incorporated

including:

Ear Specula, outer diameter 2.5 - 5 mm

Battery Handle 2x 1.5 Volt Battery Spare Lamp

Please note: Image for 826201 also contains optional accessories.

Components/Spare Parts see chapter 14

164 HS 30

1

ENT Visit Bag





for infants, length 13 cm

826101

ENT Trolley for Visits, aluminium case, silver, weight: 5.5 kg, with spacious compartments for documents and notebook, inner dimensions (w x h x d): 420 x 360 x 190 mm

Recommended contents:

necommende contentor					
094120	LED Headlight, light model, with white light, rechargeable battery box on headband, illumination area adjustable	403555	KILLIAN-STRUYCKEN Nasal Speculum, standard model, blade length 55 mm, length 13.5 cm		
	from 10 – 100 mm in diameter with 40 cm working distance	423700	REUTER Epistaxis Balloon Catheter , sterile		
122003	HARTMANN Ear Speculum, standard model, outer diameter 3 mm, length 3.6 cm	10x 740000	BRÜNINGS Tongue Depressor, length 19 cm		
2x 122004 3x 122005	Same, outer diameter 4 mm Same, outer diameter 5 mm	4x 767901 6x 767906	Laryngeal Mirror, with handle, size 1 Same, size 6		
3x 122006 122007	Same, outer diameter 6 mm Same, outer diameter 7.5 mm	785005	BRÜNINGS Life-Saving Tube , outer diameter 5 mm, length 20 cm		
150100	STACKE Ear Probe, silver,	785007	Same, outer diameter 7 mm		
10x 151011	length 10.5 cm Cotton Applicator, standard model,	791202	Scissors, curved, sharp/blunt, length 14.5 cm		
	triangular serrated, diameter 1.1 mm, working length 13 cm	792402	Dressing Forceps, medium, length 14.5 cm		
2x 152301	Ear Hook, without ball end, size 1, length 15.5 cm	793402	Tissue Forceps, 1 x 2 teeth, medium, length 14.5 cm		
2x 152202	WAGENER Ear Hook, with ball end, size 2, length 15.5 cm	15006 B	"ULTRA STOP" Antifog Solution, 25 ml, pipette bottle		
2x 153001	WEBER-LOCH Ear Curette, size 1, length 14.5 cm	1216 AA	HOPKINS® Straight Forward Telescope		
2x 153310	BUCK Ear Curette, blunt, size 0, length 14.5 cm		0° , for oto-nasopharyngoscopy, diameter 4 mm, length 11 cm, autoclavable , fiber optic light transmission incorporated,		
2x 153301	Same, size 1		color code: green		
5x 156000	LUCAE Ear Forceps, bayonet-shaped, length 14.5 cm	11301 D4	Battery Light Source LED for Endoscopes, with fast screw thread,		
162500	STRÜMPEL Ear Forceps , working length 8 cm		brightness > 110 lm / > 150 klx, burning time > 120 min, weight approx. 150 g		
5x 400500	HARTMANN Nasal Speculum for adults, length 13 cm		ready for use, suitable for wipe disinfection , with 2 Photo Batteries 121306 P		
402000	HALLE-TIECK Nasal Speculum,				

12-11

HS 21 165

Accessories for Oto-Rhino-Laryngoscopy

Antifog Solution









15006 B

15006 C

15006 D

"ULTRA STOP" Antifog Solution, 25 ml, 15006 B

pipette bottle

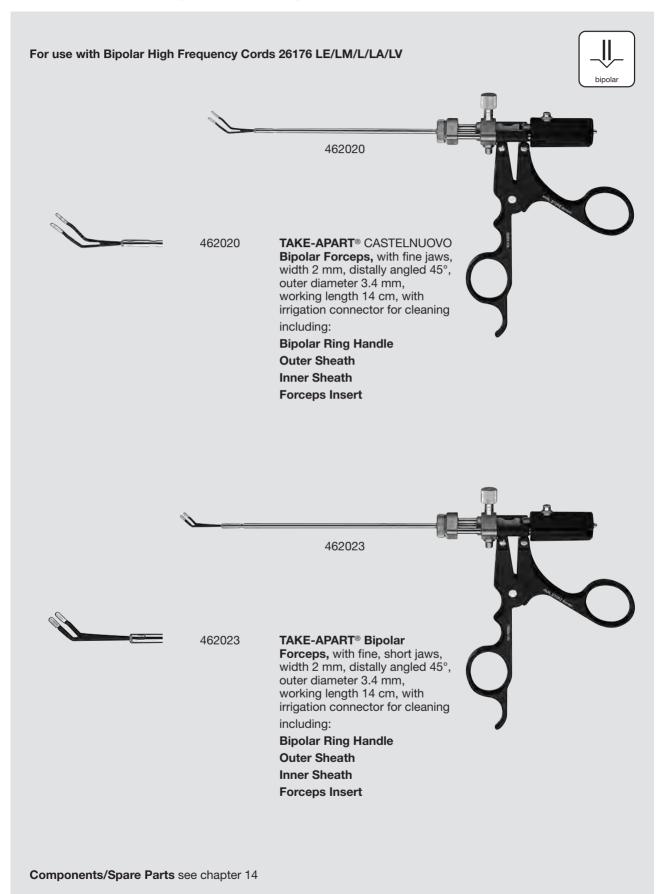
"ULTRA STOP" **Antifog Solution,** 30 ml, sterile, pierce bottle 15006 C

"ULTRA STOP" **Antifog Solution,** 15 ml, atomizer bottle 15006 D



TAKE APART® Bipolar Forceps





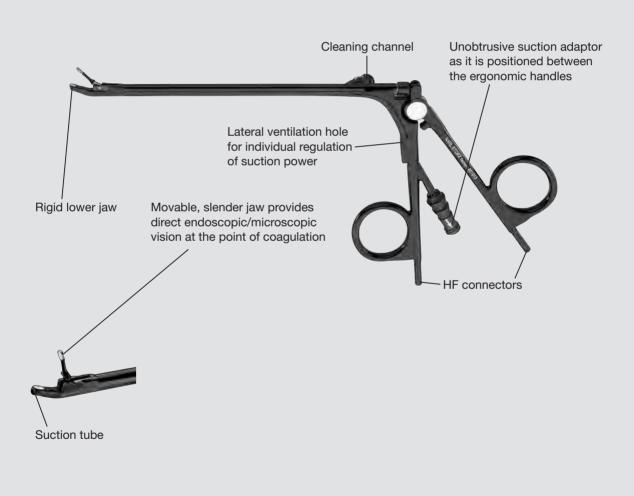




Special Features:

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





STAMMBERGER Bipolar Suction Forceps



Indications/Applications:

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

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







461010

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





461015

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

Bipolar High Frequency Cords see chapter 13, UNITS

COA 3 C

171

Bipolar Forceps

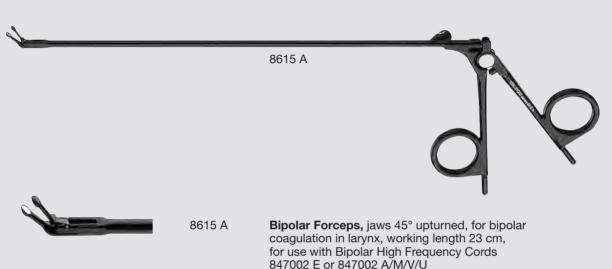


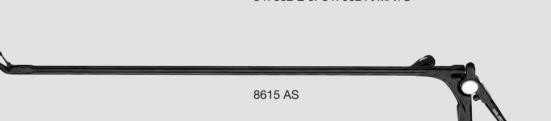
Special Features:

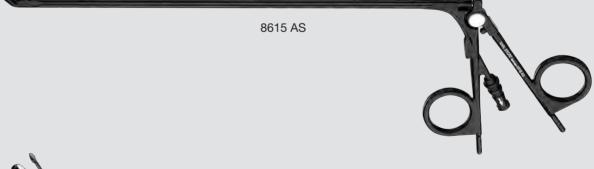
- Bipolar coagulation
- Insulated except for small coagulation area on the instrument tip
- Single action jaws
- Distance between cautery poles may be varied, enabling punctual and extensive coagulation
- With and without suction

- Special design of the movable jaw provides direct endoscopic/microscopic vision at the point of coagulation
- Slim design enables good availability of previously hard to reach regions for cauterization









Bipolar Suction Forceps, jaws 45° upturned, with suction channel, for bipolar coagulation in larynx, working length 23 cm, for use with Bipolar High Frequency Cords 847002 E or 847002 A/M/V/U

Bipolar High Frequency Cords see chapter 13, UNITS

8615 AS



Bipolar Coagulation Forceps



COA 5 F 173



STORY - ENDOSKOPE

Bipolar Coagulation Forceps

Bipolar Coagulation Forceps, insulated for use with Bipolar High Frequency Cords 847000 or 84700	00 A/E/M/V	bipolar
TOP HOPE	843016	Bipolar Coagulation Forceps, insulated, angular, very delicate, tip 0.2 mm, length 16 cm
MATE STICE AS	843016 F	Same, grip insulated, front part not insulated, pointed, length 16 cm
770 min.	843116	Bipolar Coagulation Forceps, insulated, angular, pointed, length 16 cm
ASIL 17022 Darkey	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
AND ATTOCK	844219	Same, blunt, tip 1 mm, length 19 cm
THE LIEST	844319	Same, slender, tip 0.5 mm, length 19 cm



Bipolar Coagulation Forceps

Bipolar Coagulation Forceps, insulated for use with Bipolar High Frequency Cords 847000 or 847000 A	/E/M/V	bipolar
	844320	Bipolar Coagulation Forceps, insulated, bayonet-shaped, blunt, with integrated suction channel and cut-off hole, tip 1.4 mm, length 20 cm
VIIII 00 1000	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
The House	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
145 MBH 2	845219	Bipolar Coagulation Forceps, insulated, angled tip, bayonet-shaped, blunt, tip 2 mm, length 19 cm

7

COA 7 175





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





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



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

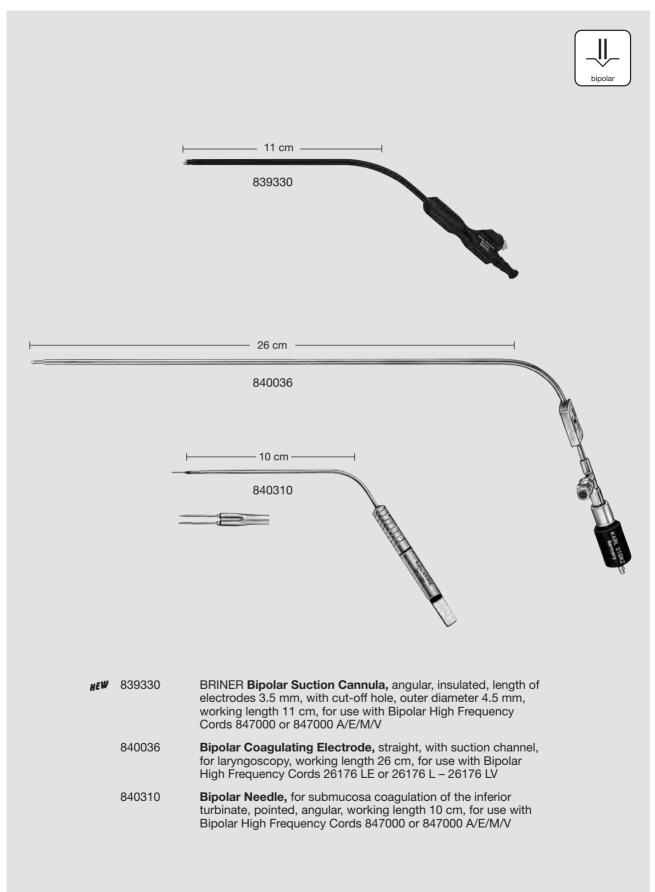


Bipolar Coagulation Forceps, insulated, for oral cavity and tonsillectomy, tip with short 45° curve, with integrated suction channel, with cut-off hole, length 21 cm



Bipolar Coagulation



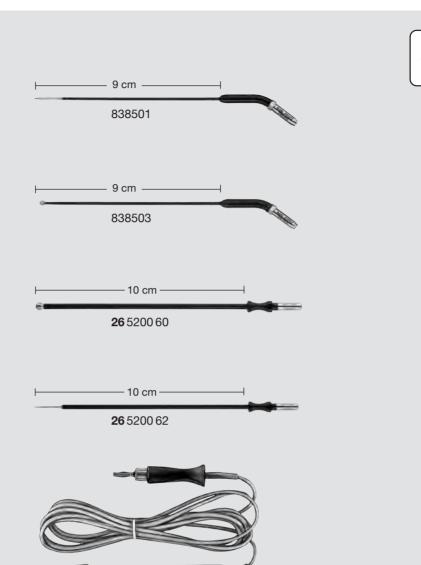


12-11

COA 9 177





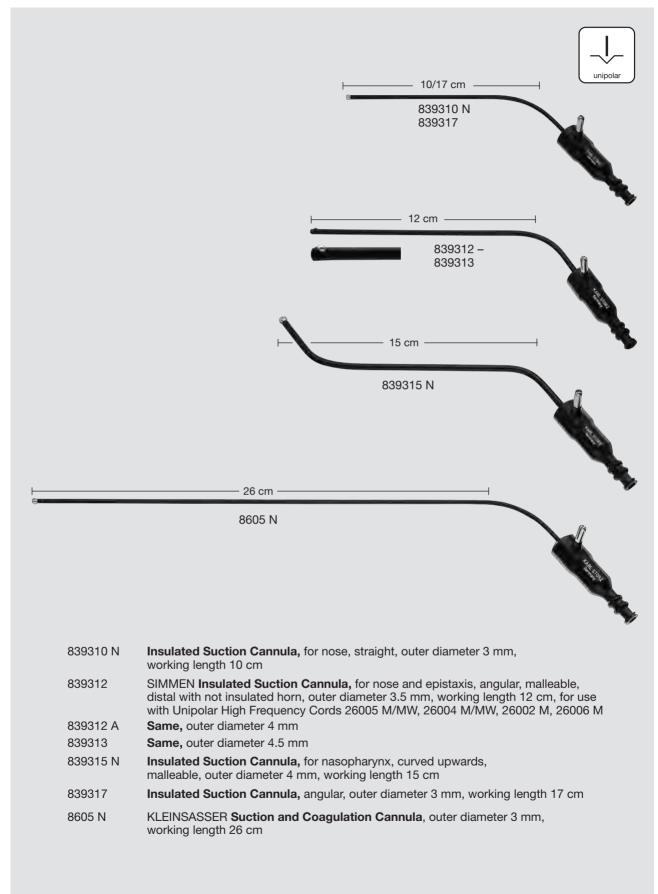


838501	Needle Electrode, for sub mucosa diathermy of the inferior turbinate, working length 9 cm
838503	Ball Electrode, for epistaxis, working length 9 cm
26 5200 60	Ball Electrode, straight, diameter 4 mm, working length 10 cm
26 5200 62	Needle Electrode, straight, working length 10 cm
26 5200 46	Electrode Handle, without buttons, with integrated connecting cable, length 300 cm

26 5200 46

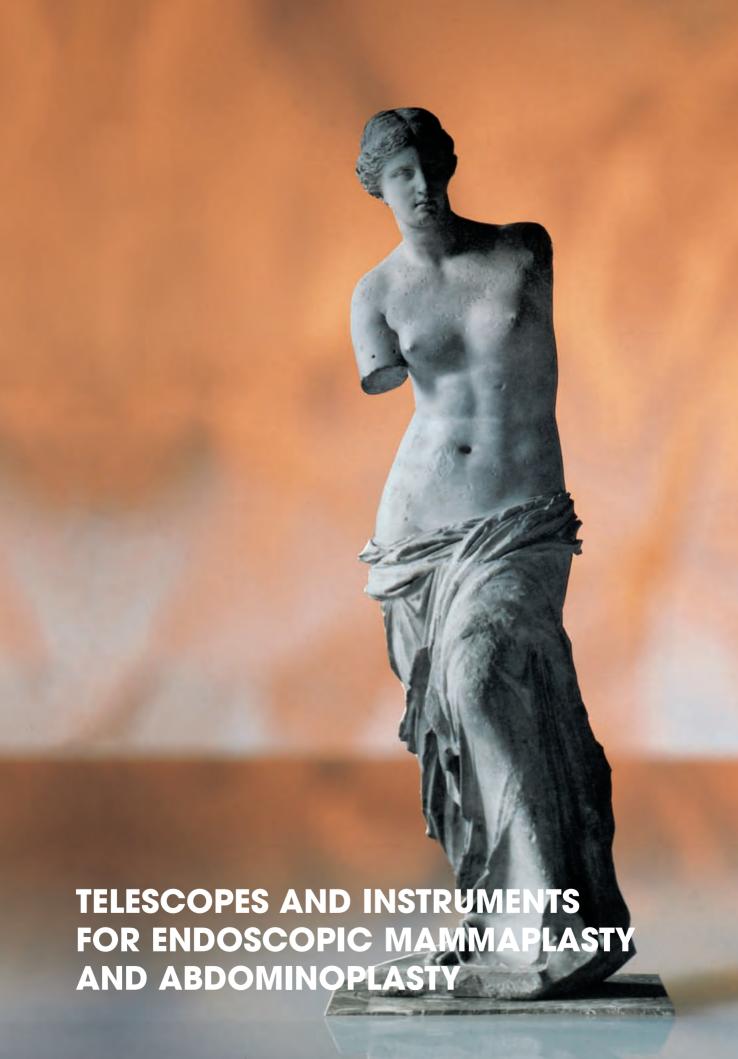


Unipolar Coagulation



12-11

COA 11 179

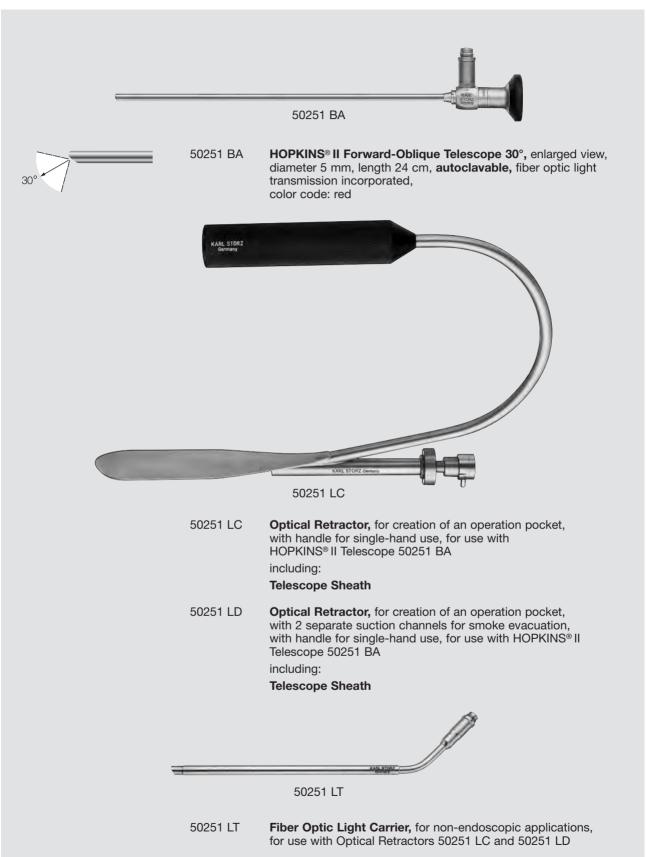


HOPKINS® II Telescope, Optical Retractor

Components/Spare Parts see chapter 14

for Mammaplasty and Abdominoplasty





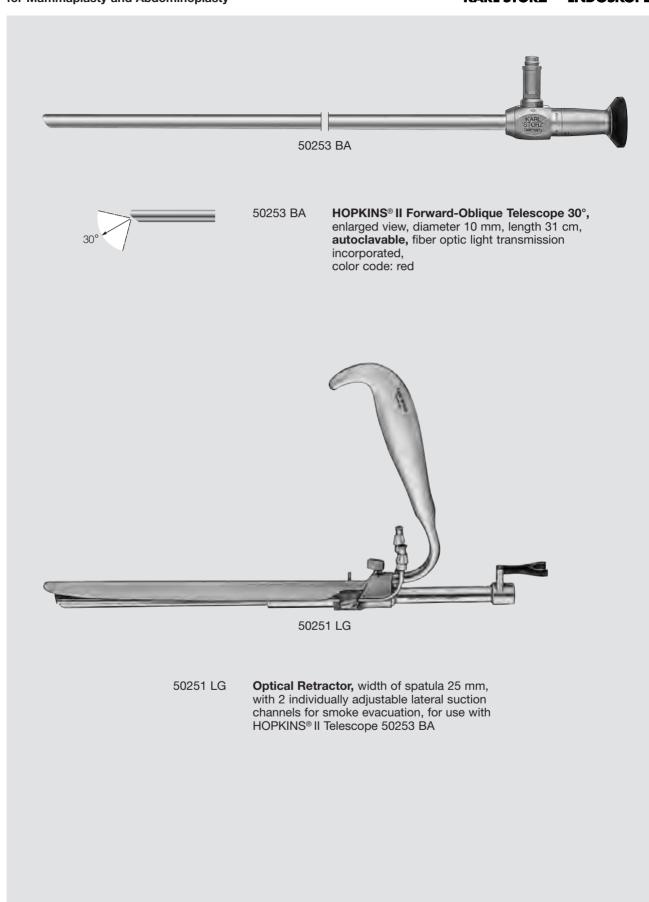
96-9

182 MP 2 A

HOPKINS® II Telescope, Optical Retractor

for Mammaplasty and Abdominoplasty





MP 3 A

Illuminated Retractors

for Mammaplasty





496 H **Retractor,** with fiber optic light carrier, width of spatula 25 mm, length 14 cm

50251 R Retractor, with fiber optic light carrier, with teeth, with suction channel for smoke evacuation, width of spatula 30 mm, length 9 cm

50251 RG Retractor, with fiber optic light carrier, with atraumatic teeth, with suction channel for smoke evacuation, width of spatula 35 mm, length 12 cm

Scissors, Dissecting and Grasping Forceps

CLICK/line - rotating, dismantling, insulated, with connector pin for unipolar coagulation



Size 5 mm

Operating instruments, **length 30 cm**, for use with trocars size 6 mm

Operating instruments, **length 43 cm**, for use with telescopes with inbuilt working channel, as well as trocars size 6 mm



Longth			Hai	ndle		
Length	33151	33152	33153	33156	33125	33127
30 cm	NEW	NEW	NEW	NEW	**	
43 cm	9	90	90	90	40	

Double action jaws

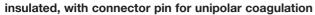
Working Insert			Complete	instrument		
34210 MS	34251 MS	_	_	_	34225 MS	34227 MS
34410 MS	34451 MS	-	-	-	34425 MS	34427 MS



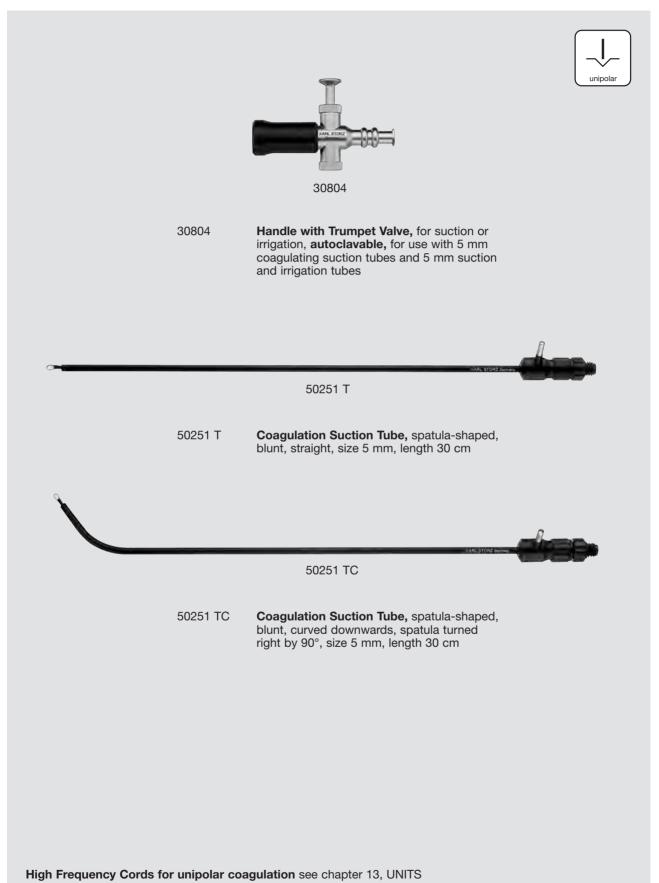
33210 MD	33251 MD	33252 MD	33253 MD	33256 MD	33225 MD	33227 MD
33410 MD	33451 MD	33452 MD	33453 MD	33456 MD	33425 MD	33427 MD



Coagulation Suction Tubes



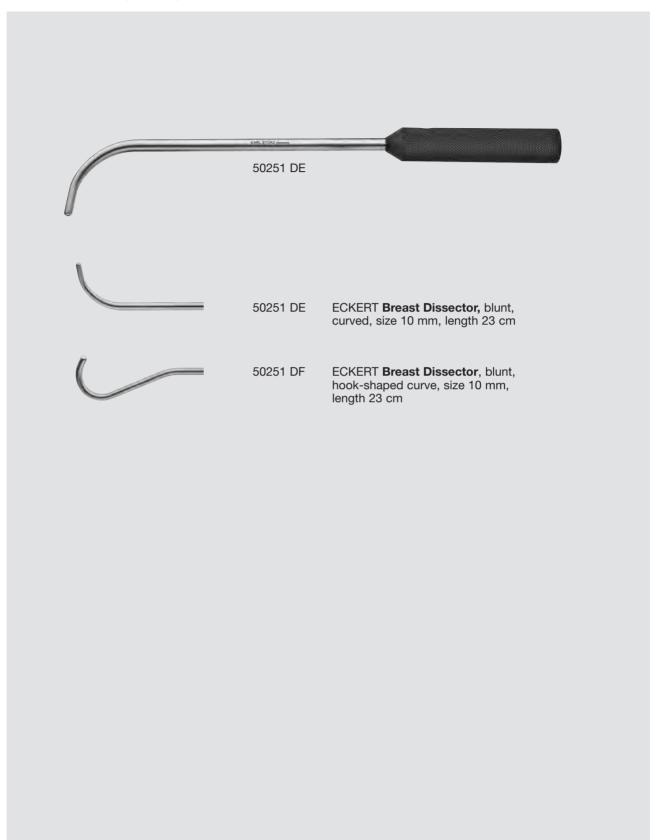




186 MP 6 B

ECKERT Instrument Set for Mammaplasty





Unipolar Endo-Dissector



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

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

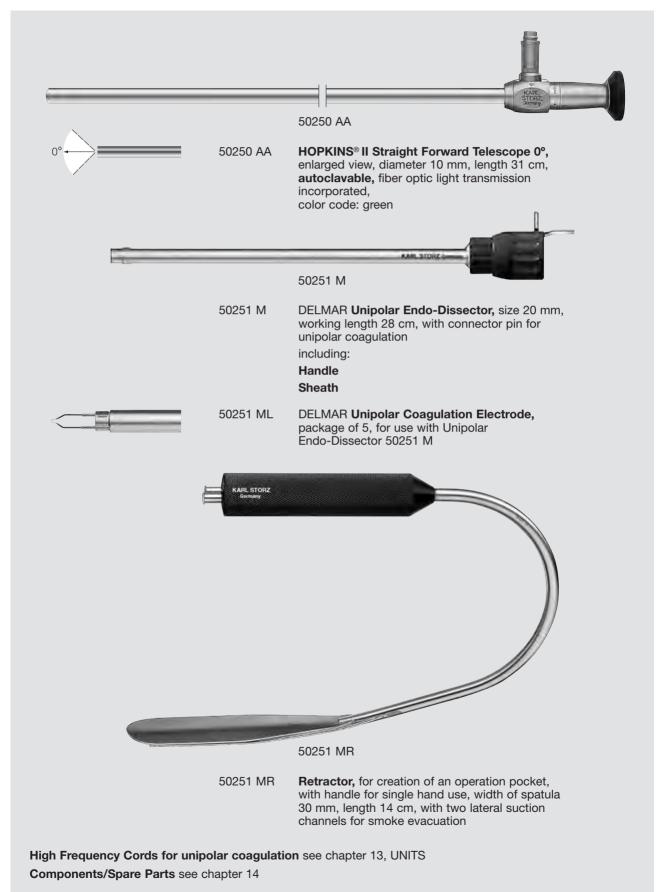
By means of endoscopic view, the unipolar endodissector facilitates very precise preparation in respect of the shape of the implant. The fact that it is possible to coagulate at the same time means that a bloodless pocket can be maintained, without haematoma. No drainage is necessary.

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

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

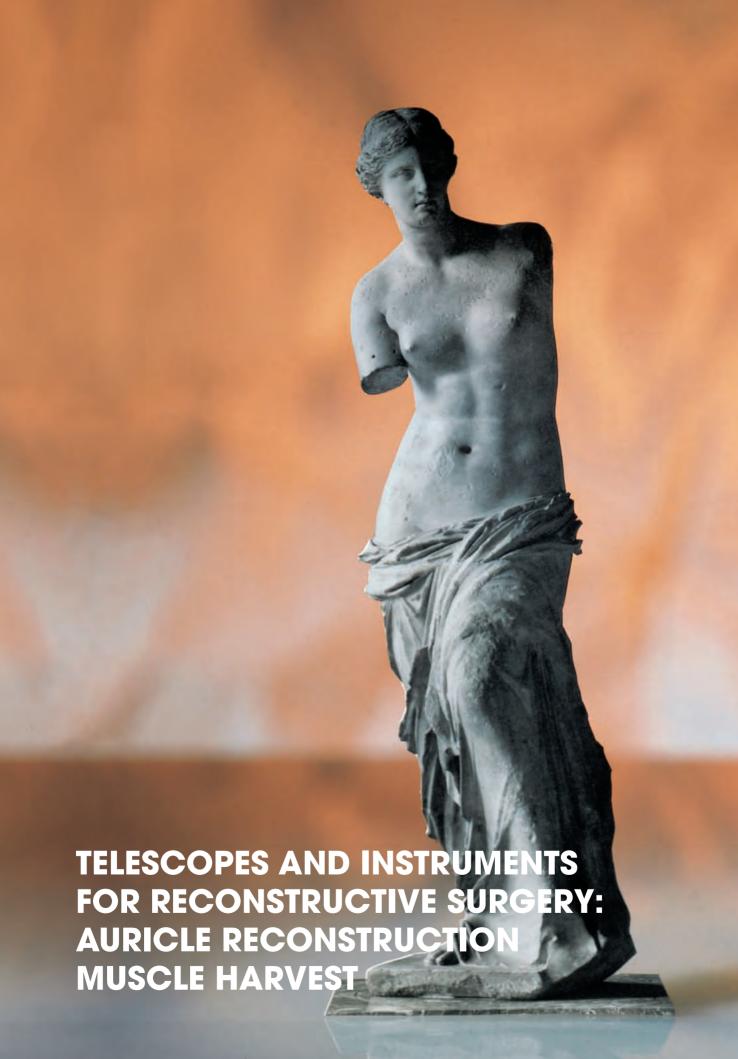
HOPKINS® II Telescope, Unipolar Endo-Dissector, Unipolar Coagulation Electrode, Retractor





9-03

MP 9 B 189



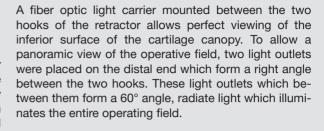
Instruments for Auricle Reconstruction



I. Costal Cartilage Removal Phase

Curved Dissector

Several portions of costal cartilage are removed in order to fashion a 3-dimensional model that replicates the shape of a normal ear. Cartilage removal is generally carried out on the sixth, seventh, eighth and ninth costal cartilages. Following the incision of the skin and rectus abdominis muscle, it is important that the anterior surface of these costal cartilages is fully exposed in order to assess their shape and size and select the fragments that will be removed. Following incision of the fascia covering the anterior portion of the cartilage, the curved dissector is slipped under the cartilage so that the anterior perichondrium is released from the fascia and from the muscle insertions of the rectus abdominis muscle. This procedure allows full exposure of the anterior surface of the costal cartilages, as well as its junction with the rib and intercostal muscle plane.







Retractor with Integrated Fiber Optic Light Carrier

Costal cartilage is generally removed on the side of the ear that has to be reconstructed, leaving the posterior perichondrium intact. It is essential to have adequate illumination in order to rasp the posterior surface of the costal cartilages underneath the perichondrium. When moving from one costal cartilage to the other, there is a risk of opening the pleura in the area of the synchondrosis if the dissector is allowed to slip from the subperichondral plane. The retractor with integrated fiber optic light carrier is thus designed that it allows the last cartilaginous segments to be raised so that their inferior surface receives adequate illumination. Two sturdy hooks whose curves and distance apart have been carefully designed so that they do not obstruct the visual field, allow the inferior margin of the costal cartilage to be hooked without trauma. Due to a certain degree of elasticity in the cartilage (particularly in children), this operation facilitates to a considerable degree access to the posterior surface of the last costal cartilages.

II. Costal Cartilage Graft Fashioning Stage

The final quality of a reconstructed ear largely depends on the quality of the cartilaginous model that replicates the shape of a normal ear. A series of instruments has been designed to facilitate the fashioning of the cartilage. All these instruments have the same type of handle whose cylindrical shape allows the position of the working end of the instrument to be easily changed. Its fluted surface also ensures a firm grip.

Curved Dissector

Prior to being fashioned, the costal cartilage segments are freed of any residual muscle insertions (intercostal muscles) and perichondrial remains. This curved dissector, which consists of a small plane on which the index finger can rest, is used to clean off the cartilage segments.



3-992

192 E-RC 2

Instruments for Auricle Reconstruction



Sharp-edged Gouge

This gouge which was designed after those used by wood sculptors is very useful for digging out cartilage and lifting off shavings. It permits full movement control and is essentially used to create the raised contours of the anthelix on the fragment that constitutes the base of the model. The instrument can also be used to refine the fragment that will be used for the helix by giving it its gutter shape. This type of instrument is the one most frequently used for this stage of the operation. Its ultra fine edge must be sharpened. It is recommended always to have a spare one at hand since any bony elements that might be present in the cartilage may impair the cutting edge. The cylindrical shape of the handle allows the direction of the cutting edge to be easily changed if necessary.

Hook-shaped Curette

This type of curette in the shape of an interrogation mark has a cutting edge. The latter is used for rasping and scraping the surface of a cartilage segment in order to make it smoother. The shape of the curette was designed so as to avoid the accumulation of cartilaginous debris in the centre. By dipping it into a small cup of salt solution any accumulated debris is easily removed.



Surgical Handle

This type of surgical handle for blades can be fitted with disposable blades No. 15 and No. 11.

The cylindrical shape of the fluted handle affords an excellent grip of the instrument and precise multidirectional use of the blade tip.



Curette

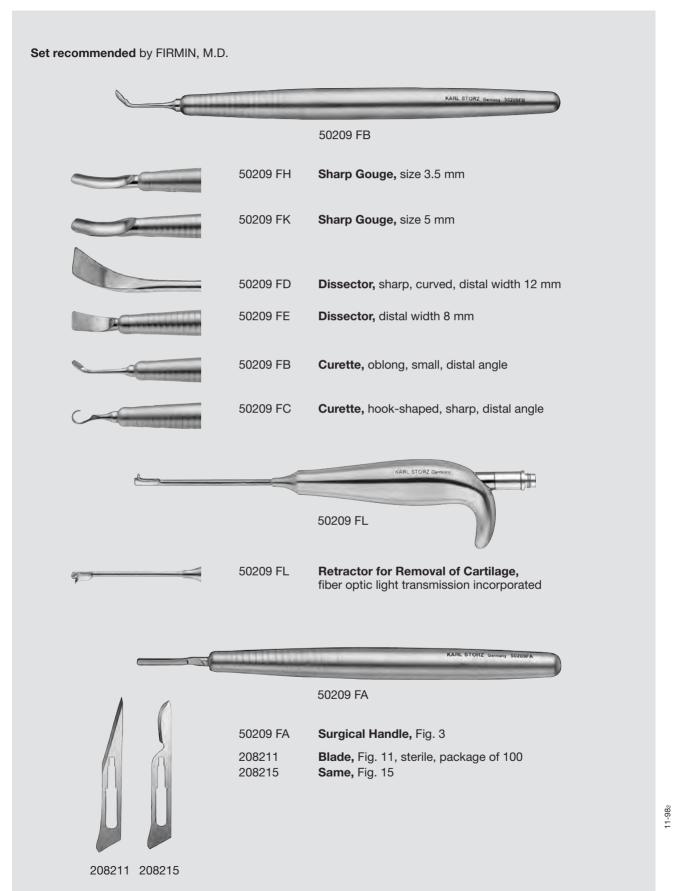
Using these fine sharp-edged curettes makes it possible to deepen very narrow spaces between certain structures.

F. FIRMIN, M. D., Clinique Georges Bizet, Paris, France



Instruments for Auricle Reconstruction





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FIRMIN Auricle Reconstruction Trainer



Autologous rib cartilage is frequently used for auricle reconstruction. Imitating the complicated shape of the auricle may seem difficult at first. However, this becomes straightforward if the technique receives an adequate amount of practice before the first operation is performed.

KARL STORZ has developed a special training model in collaboration with Dr. FIRMIN (Paris, France). The auricle is reconstructed from a polysterol foam plate using a simple scalpel and placed on the base place. A rubber diaphragm is then placed over the base plate and a vacuum is created

using a syringe. The resulting vacuum draws the rubber diaphragm over the artificial auricle. The rubber diaphragm thus resembles the skin and provides an insight into how the artificial auricle would appear in a clinical setting.

The trainer permits the step-by-step reconstruction of an auricle and enables testing the quality of its contours.

The set includes a training DVD from Dr. FIRMIN.

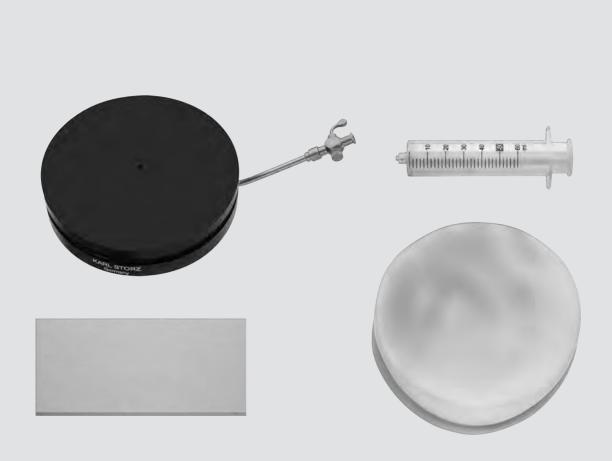
FIRMIN, M. D., Paris, France

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FIRMIN Auricle Reconstruction Trainer





50209 RT Auricle Reconstruction Trainer

including:

Base Plate, with LUER-adaptor for creating a vacuum 20x **Foam Plate,** size 75 x 150 mm, thickness 7 mm 2x **Rubber Diaphragm**

Syringe, 60 ml

Please note: Set includes a Training DVD. **Components/Spare Parts** see chapter 14

KARAM Tissue Retractor



The tissue retractor for grasping and retracting tissue is used in aesthetic, reconstructive as well as oral and maxillary surgery. The instrument can be used instead of two retraction instruments as previously required.

This allows the assistant to retain a free hand for other tasks, such as cutting suture material, coagulation or suction in the surgical field.

KARAM, M. D., Amchit, Lebanon

The main indications are:

- Surgical access to maxillary "LE FORT" osteomies as well as other maxillary approaches to tumors
- Surgical access for chin correction, separately or in the context of orthognathic procedures
- Flap retraction in facelifts
- Any oral access for lip or jaw surgery
- Any procedure requiring extensive retraction



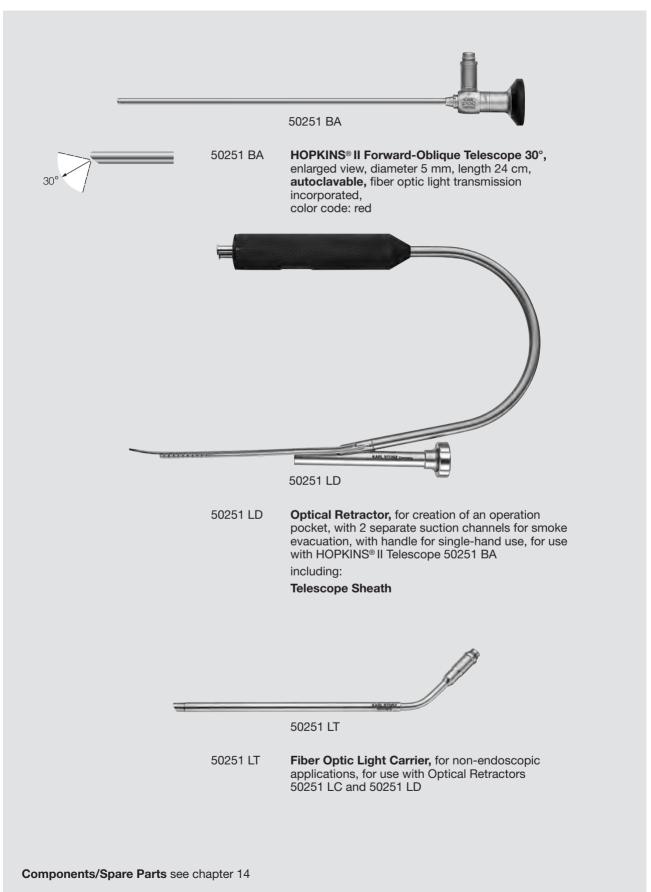
50205 EK

Tissue Retractor, with ratchet, for retraction of tissue during surgical procedures to the face

HOPKINS® II Telescope, Optical Retractors

for Reconstructive Surgery



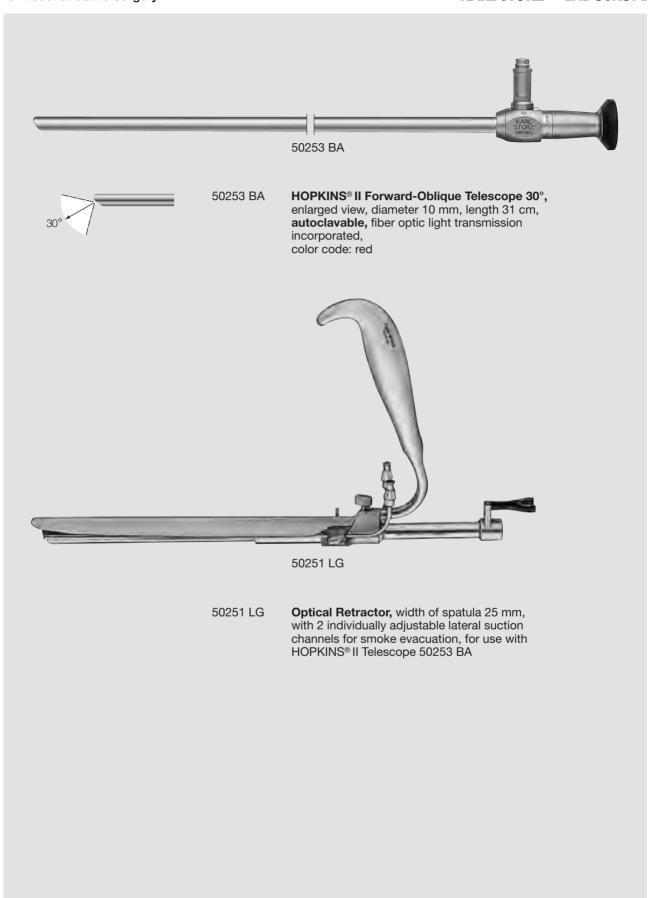


198 RC-RET 2 A

HOPKINS® II Telescope, Optical Retractors

for Reconstructive Surgery

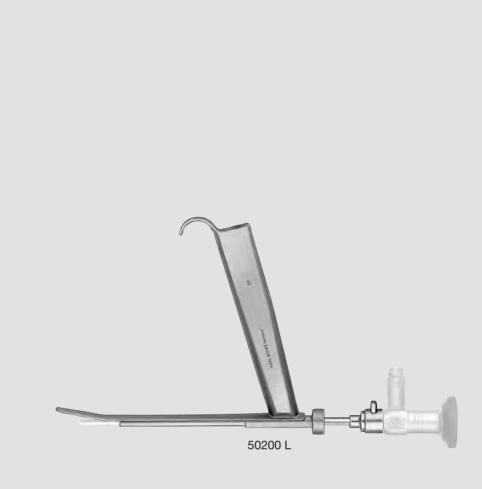




Optical Retractors

for Reconstructive Surgery





50200 L

Optical Retractor, with handle, width of distal end 8 mm, with fixation screw for control of penetration depth of endoscope, with Telescope Sheath 50200 LS, for use with HOPKINS® II telescopes diameter 4 mm, length 18 cm

Illuminated Retractors







496 H **Retractor,** with fiber optic light carrier, width of spatula 25 mm, length 14 cm

50251 R **Retractor,** with fiber optic light carrier, with teeth, with suction channel for smoke evacuation, width of spatula 30 mm, length 9 cm

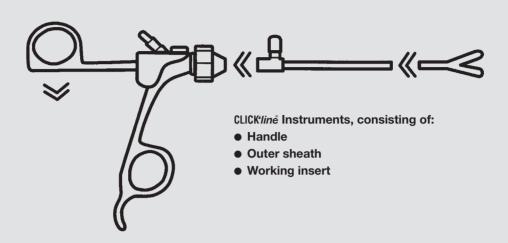
50251 RG **Retractor,** with fiber optic light carrier, with atraumatic teeth, with suction channel for smoke evacuation,

width of spatula 35 mm, length 12 cm

KARL STORZ CLICK line

rotating, dismantling, endoscopic instruments





Nothing could be simpler!

The CLICK'line 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 of 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, CLICK'line 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 CLICK'line 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:

- (a) Select the required instrument size and the required type of jaws
- (b) 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
- (c) 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.

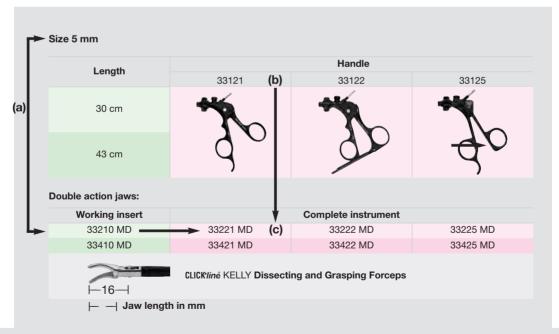
Example:



Dissecting and Grasping Forceps

CLICK/line – rotating, dismantling, insulated, with connector pin for unipolar coagulation





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.

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Plastic Handles

for Scissors, Dissecting and Grasping Forceps, insulated, CLICK*/ine - 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 pressure

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
- Attractive 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 CLICKtime Plastic Handle, with disengageable ratchet

High Frequency Cords for unipolar coagulation see chapter 13, UNITS

9

Plastic and Metal Handles

for Scissors, Dissecting and Grasping Forceps,
CLICK'line – rotating, with and without connector pin for unipolar coagulation



Plastic Handles, with and without ratchet, made of high-quality plastics – meeting the highest safety requirements for both patient and user



with connector pin for unipolar coagulation



33121 CLICK'line Plastic Handle, without ratchet



33122 CLICKtime Plastic Handle, with MANHES style ratchet



33125 CLICK'line Metal Handle, rotating, without ratchet

without connector pin for unipolar coagulation



33131 CLICK'line Metal Handle, rotating, without ratchet

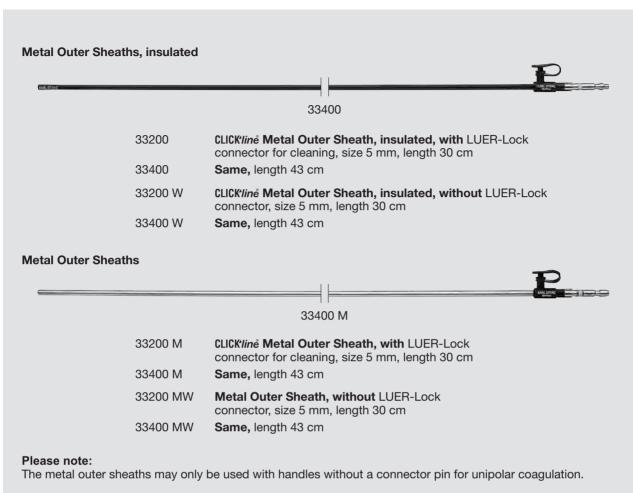
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High Frequency Cords for unipolar coagulation see chapter 13, UNITS

RC-C 1 B

Outer Sheaths, Plugs and Accessories for Handles







33120	Rotating Wheel, for CLICK'line and RoBi® handles, autoclavable, package of 5, makes rotation of outer sheath more comfortable
33131 F	Spring, for Handle 33131, to obtain a self-retaining effect the spring has to be manually attached to the handle, autoclavable
29100	Plug, for LUER-Lock connector for cleaning, black, autoclavable, package of 10
29100 A	Color-Coded Plug, for LUER-Lock connector for cleaning, red, green, black, 10 each, package of 30, for easier identification of jaws on the OR table

Dissecting and Grasping Forceps

CLICK/line - rotating, dismantling, insulated, with connector pin for unipolar coagulation



Size 5 mm

Operating instruments, **length 30 cm**, for use with trocars size 6 mm

- 18 ----|

├ 17 **├**

33210 MA

33410 MA

Single action jaws

Operating instruments, **length 43 cm**, for use with telescopes with inbuilt working channel, as well as trocars size 6 mm



l on with		Har	ndle	
Length	33151	33152	33153	33156
30 cm	4	#	+	=
43 cm	9	90	90	90
ouble action jaws				
Working insert		Complete i	instrument	
33210 MD	33251 MD	33252 MD	33253 MD	33256 MD
33410 MD	33451 MD	33452 MD	33453 MD	33456 MD
<u>⊢16</u> —	CLICK'line KELLY D	issecting and Grasp	ing Forceps	
33210 ML	33251 ML	33252 ML	33253 ML	33256 ML
33410 ML	33451 ML	33452 ML	33453 ML	33456 ML
<u> </u>	CLICK'line KELLY D	issecting and Grasp	ing Forceps, long	
33210 KJ	33251 KJ	33252 KJ	33253 KJ	33256 KJ
33410 KJ	33451 KJ	33452 KJ	33453 KJ	33456 KJ
<u></u> ⊢13 ⊢	CLICK'line REDDICA	<-OLSEN Dissecting	and Grasping Force	eps
33210 DN	33251 DN	33252 DN	33253 DN	33256 DN
33410 DN	33451 DN	33452 DN	33453 DN	33456 DN
	CLICK <i>lin</i> e Dissecti	ng and Grasping Fo	rceps, "dolphin nose"	,

12-11

RC-C 3B

33252 MA

33452 MA

CLICK'line MANHES Grasping Forceps, "cobra jaws", 1 x 2 teeth

33253 MA

33453 MA

33256 MA

33456 MA

207

33251 MA

33451 MA

Dissecting and Grasping Forceps

33121

CLICK'line - rotating, dismantling, insulated, with connector pin for unipolar coagulation



33125

Size 5 mm

Operating instruments, **length 30 cm**, for use with trocars size 6 mm

Length

Operating instruments, **length 43 cm**, for use with telescopes with inbuilt working channel, as well as trocars size 6 mm

Handle

33122



30 cm	***	**	***		
43 cm	9		90		
Double action jaws					
Working insert		Complete instrument			
33210 MD	33221 MD	33222 MD	33225 MD		
33410 MD	33421 MD	33422 MD	33425 MD		
<u></u>	CLICK'line KELLY Dissecti	ing and Grasping Forceps			
33210 ML	33221 ML	33222 ML	33225 ML		
33410 ML	33421 ML	33422 ML	33425 ML		
<u> </u>		ing and Grasping Forceps,			
33210 KJ	33221 KJ	33222 KJ	33225 KJ		
33410 KJ	33421 KJ	33422 KJ	33425 KJ		
<u></u> ⊢13−	CLICK'line REDDICK-OLSE	EN Dissecting and Grasping	g Forceps		
33210 DN	33221 DN	33222 DN	33225 DN		
33410 DN	33421 DN	33422 DN	33425 DN		
<u> </u>	CLICK'line Dissecting and Grasping Forceps, "dolphin nose"				
Single action jaws					
33210 MA	33221 MA	33222 MA	33225 MA		
33410 MA	33421 MA	33422 MA	33425 MA		
— 17 —I	CLICK <i>iin</i> ë MANHES Gras j	ping Forceps, "cobra jaws",	1 x 2 teeth		

6

208 RC-C 4 B

Scissors

CLICK/line - rotating, dismantling, with and without connector pin for unipolar coagulation



Size 5 mm

Operating instruments, **length 30 cm**, for use with trocars size 6 mm

Operating instruments, **length 43 cm**, for use with telescopes with inbuilt working channel



Length	Handle			
Lengui	33151	33121	33125	33131
30 cm	NEW	**	**	•
43 cm	9	90	90	90

Double action jaws

Working insert	Complete instrument			
34210 MS	34251 MS	34221 MS	34225 MS	34231 MS
34410 MS	34451 MS	34421 MS	34425 MS	34431 MS
⊢ 15 ⊣	CLICK'line METZEN	IBAUM Scissors, cur	ved	
34210 MA	34251 MA	34221 MA	34225 MA	34231 MA
34410 MA	34451 MA	34421 MA	34425 MA	34431 MA



CLICK*line* Scissors, serrated, curved, spoon-shaped jaws

Single action jaws

34210 EH	34251 EH	34221 EH	34225 EH	34231 EH
34410 EH	34451 EH	34421 EH	34425 EH	34431 EH



CLICK'line Hook Scissors

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RC-C 5 209

RoBi® Bipolar Grasping Forceps

rotating, dismantling, with connector pin for bipolar coagulation, CLERMONT-FERRAND model



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



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

210 RC-BI

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, Operating instruments, length 43 cm, for bipola for use with trocars size 6 mm use with telescopes with inbuilt working channel as well as trocars size 6 mm Handle **Outer Sheath** 38161 Length 36 cm Length 43 cm **Double action jaws** Working insert Complete instrument 38310 MD 38361 MD 38410 MD 38461 MD RoBi® KELLY Dissecting and Grasping Forceps, CLERMONT-FERRAND model, especially suitable for dissection 19 38361 ML 38310 ML RoBi® KELLY Dissecting and Grasping Forceps, CLERMONT-FERRAND model, especially suitable for dissection 24 38310 MA 38361 MA 38410 MA 38461 MA NEW RoBi® MALZONI Dissecting and Grasping Forceps, especially suitable for dissection 24 38310 OM 38361 OM NEW RoBi® Grasping Forceps, CLERMONT-FERRAND model, with especially fine atraumatic serration, fenestrated jaws, with large proximal recess 18 38310 H 38361 H NEW RoBi® HESSELING Grasping Forceps, especially suitable for point coagulation 19

7-07

RC-BI 1 B 211

KOH Macro Needle Holders



The ergonomic properties of the new 5 mm KOH macro needle holder allow precise holding of the needles and the thread. The precision branches and the new locking mechanism enable easy and precise guidance of the needle with threads of thickness from 0/0 to 7/0.

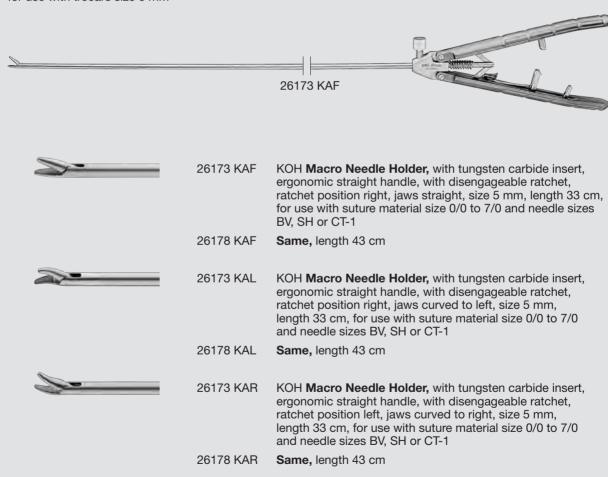
The KOH ultramicro instrument set has been developed specifically to meet the high demands of laparoscopic micosurgery and is designed to suture structures as small as 0.5 mm.

Special Features:

- Tungsten carbide inserts for firm and reliable needle positioning, as well as long durability
- Ease of operation, precise adjustable ratchet for easy and safe positioning of the needle
- Ergonomically designed handle for relaxed working

Size 5 mm

Operating instruments, **lengths 33 and 43 cm**, for use with trocars size 6 mm



Retractor for Endoscopic Harvest of the M. latissimus dorsi



The use of the new retractor for endoscopically assisted latissimus dorsi muscle harvesting in restorative or reconstructive surgery results in less visible scarring and, consequently, faster reconvalescence of the patient.

Depending on the approach selected, it is possible to avoid large skin incisions. However, large portions of the muscle can still be harvested, either as pedicled or as free muscle flaps.

Should a pedicled flap be used, a small portion of the flap remains in its original setting and is still attached to its blood supply. Free flaps are disconnected from the original blood supply and are then attached to the existing blood vessels in the new site.

The advantages of the new retractor, such as tissue protection and a secure instrument hold, are evident.

Thanks to the light fibers integrated in the blade, the retractor provides optimal illumination of the operative field and can therefore be used under direct visualization or with an endoscope 4 mm in diameter.

A simple snap-in mechanism allows the handle to be fixed in various positions, offering the user ergonomic handling. If a coagulating instrument is used for muscle harvesting, the resulting smoke vapor can be evacuated via the integrated suction channel for vapor removal.

The new retractor for endoscopically assisted latissimus dorsi muscle harvesting is particularly useful in breast reconstruction.

J. Hoffmann, M. D., Universitätsklinikum Tübingen, Germany

Retractor for Endoscopic Harvest of the M. latissimus dorsi





50251 RB Illuminated Retractor, width of blade 40 mm, fiber

optic light carrier integrated in blade, length 20 cm, for use with HOPKINS® II Telescope 30° 26105 BA

including:

Handle

50251 RS Illuminated Retractor, width of blade 30 mm, fiber

optic light carrier integrated in blade, length 15 cm, for use with HOPKINS® II Telescope 30° 50230 BA

including:

Handle

optional:

for use with 50251 RB:

26105 BA HOPKINS® II Forward-Oblique Telescope 30°,

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

incorporated, color code: red

for use with 50251 RS:

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

Recommended Fiber Optic Light Cable:

495 NCS Fiber Optic Light Cable, extremely heat-resistant,

diameter 4.8 mm, length 250 cm

Components/Spare Parts see chapter 14

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Instruments for Endoscopic Harvest of the M. latissimus dorsi



Endoscopic harvest of the latissimus dorsi muscle minimizes external scarring, enhances patient acceptance, and speeds recovery.

The muscle can be used for any reconstructive purpose, both as a local pedicled flap or for free tissue transfer. The main indication at this time is as a local pedicled flap for reconstructing large lumpectomy or quadrentectomy defects of the breast.

The advantages of endoscopic technique to decrease visible scaring and improve contour are particularly important for women undergoing breast cancer surgery.

A curved dissector is utilized for blunt dissection of the soft tissues of the back. It is available in two different lengths to facilitate dissection from the axilla to the muscular origin of the latissimus near the spine. The dissector is used both with and without endoscopic guidance.

A curved grasper is utilized to grasp and coagulate blood vessels throughout the area of dissection. It is available in two versions: either angled upwards to grasp vessels on the skin flap or downwards to grasp vessels on the chest wall. The curvature of the shaft compensates for the curve of the back when inserted via an axillary incision. The graspers are primarily used under endoscopic guidance.

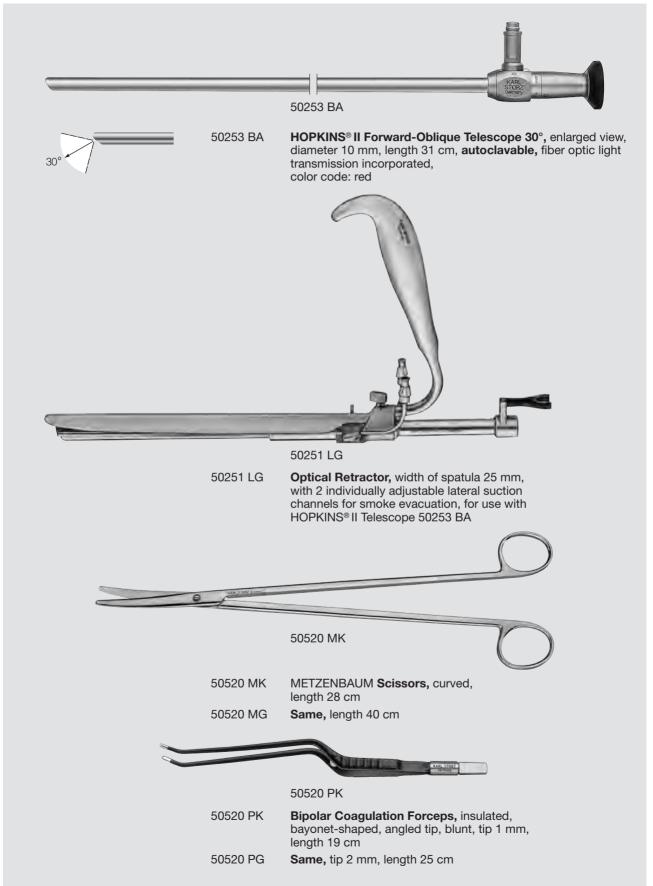
A specially designed scissors cut the origin of the latissimus muscle from the paraspinal and iliac crest areas. The angle of the scissors at the tip facilitates completing the entire operation via the axilla. The scissors are primarily used with tactile guidance of the opposite hand but may also be used with endoscopic visualization.

N. FINE, M.D. Northwestern University Medical School, Chicago, USA

Instruments for Endoscopic Harvest of the M. latissimus dorsi

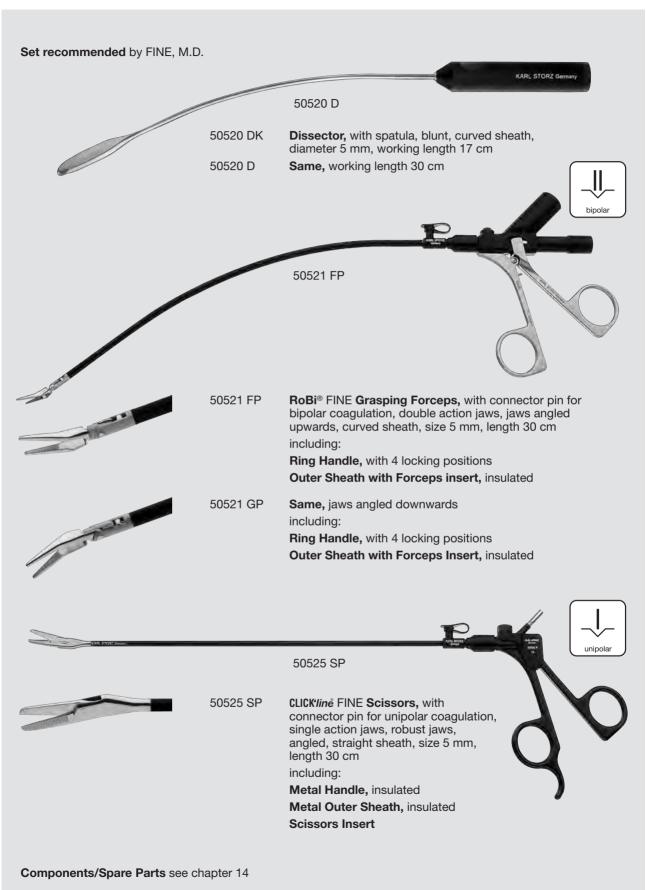
HOPKINS® II Telescope, Optical Retractor





Instruments for Endoscopic Harvest of the M. latissimus dorsi





RC 5



TELESCOPES AND INSTRUMENTS FOR SURGERY OF THE UPPER EXTREMITIES: HAND ARTHROSCOPY NERVE COMPRESSION SYNDROME

Cannulated Screw System with Target Guide



The components described in the following can be used both individually or in combination in order to treat osteosynthesis, refixation, arthrodesis and corrective osteotomy.

Target Guide

This tool has a flexible design and is suitable for the placement of Kirschner wires. It can also be used as a repositioning aid by exerting compression on fracture fragments.

Application is possible in both endoscopic wrist surgery and open surgical interventions.

Indication Possibilities

The target guide can be used for both endoscopically controlled and open osteosynthesis in the distal radius, the wrist as well as the carpal and hand bones. Further indications are the placement of Kirschner wires in the course of partial arthrodesis of the wrist or the performance of minimally invasive percutaneous osteosynthesis techniques. Temporary transmetacarpal blocks can also be performed.

Cannulated Screw System

This system features self-cutting, cannulated titanium bone screws with a diameter of 2.1/2.5 mm, having a very flat screw head and a shim that increases the surface area of the screw head. The system is available with working lengths ranging from 6 to 30 mm (diameter 2.1 mm) and from 6 to 50 mm (diameter 2.5 mm).

Indication Possibilities

Cannulated titanium bone screws can be used for all conventional osteosynthesis techniques. These were primarily designed with endoscopically controlled and/or open osteosynthesis for the distal radius as well as the carpal and hand bones in mind. In addition to fracture osteosynthesis, these screws are also suitable for partial arthodesis of the carpus due to their excellent compression properties. Furthermore, screw fixation of ligament or tendon avulsions can be achieved using minimally invasive percutaneous osteosynthesis techniques.

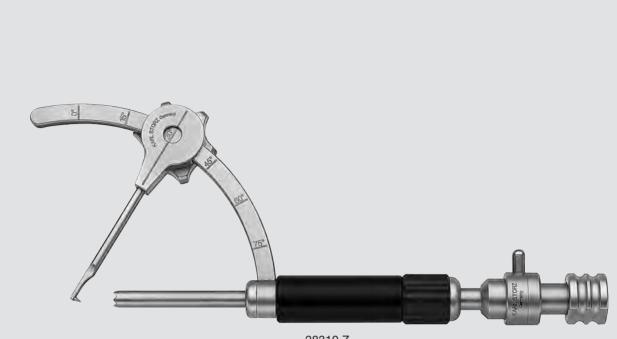
KÖNIGSBERGER, M. D. Rottweil, Germany



28310 TRG **Tray System 2.5,** for the sterilization and storage of instruments

Cannulated Screw System with Target Guide





28310 Z

28310 Z Target Guide, complete

including:

Target Hook

Guide Tube

Insert

Components/Spare Parts see chapter 14

Cannulated Screw System with Target Guide



Set recommended by KÖNIGSBERGER, M. D.



28310 GKL

28310 GKK Core Hole Drill, short, system diameter 2.5 mm

28310 KKK Same, system diameter 2.1 mm

28310 GKL Core Hole Drill, long, system diameter 2.5 mm

28310 KKL Same, system diameter 2.1 mm



28310 GGL

28310 GGK Gliding Hole Drill, short, system diameter 2.5 mm

28310 KGK Same, system diameter 2.1 mm

28310 GGL Gliding Hole Drill, long, system diameter 2.5 mm

28310 KGL Same, system diameter 2.1 mm



28310 TK

28310 TK **Depth Gauge,** short, for use with system diameter 2.1 mm

and system diameter 2.5 mm

28163 TL Same, long



28310 SK

28310 SD Handle, for use with Screwdriver 28310 SK/SL

28310 SK Screwdriver, short, cannulated

28310 SL Same, long

Cannulated Screw System with Target Guide



3x 28310 KA	ENDOSCREW, blue, cannulated, diameter 2.1 mm, length 6 mm	3x 28310 GA	ENDOSCREW, gold, cannulated diameter 2.5 mm, length 6 mm
3x 28310 KB	Same, length 7 mm	3x 28310 GB	Same, length 7 mm
3x 28310 KC	Same, length 8 mm	3x 28310 GC	Same, length 8 mm
3x 28310 KD	Same, length 9 mm	3x 28310 GD	Same, length 9 mm
3x 28310 KE	Same, length 10 mm	3x 28310 GE	Same, length 10 mm
3x 28310 KF	Same, length 11 mm	3x 28310 GF	Same, length 11 mm
3x 28310 KG	Same, length 12 mm	3x 28310 GG	Same, length 12 mm
3x 28310 KH	Same, length 13 mm	3x 28310 GH	Same, length 13 mm
3x 28310 KI	Same, length 14 mm	3x 28310 GI	Same, length 14 mm
3x 28310 KJ	Same, length 15 mm	3x 28310 GJ	Same, length 15 mm
3x 28310 KK	Same, length 16 mm	3x 28310 GK	Same, length 16 mm
3x 28310 KL	Same, length 17 mm	3x 28310 GL	Same, length 17 mm
3x 28310 KM	Same, length 18 mm	3x 28310 GM	Same, length 18 mm
3x 28310 KN	Same, length 19 mm	3x 28310 GN	Same, length 19 mm
3x 28310 KO	Same, length 20 mm	3x 28310 GO	Same, length 20 mm
3x 28310 KP	Same, length 22 mm	3x 28310 GP	Same, length 22 mm
3x 28310 KQ	Same, length 24 mm	3x 28310 GQ	Same, length 24 mm
3x 28310 KR	Same, length 26 mm	3x 28310 GR	Same, length 26 mm
3x 28310 KS	Same, length 28 mm	3x 28310 GS	Same, length 28 mm
3x 28310 KT	Same, length 30 mm	3x 28310 GT	Same, length 30 mm
0X 200 10 1X1	Came, length oo min	3x 28310 GU	Same, length 35 mm
		3x 28310 GV	Same, length 40 mm
		3x 28310 GW	Same, length 45 mm
		3x 28310 GX	Same, length 50 mm
		3X 203 TO GX	Same, length 50 mm
28310 KGK	Core Hole Drill, short,	28310 SK	Screwdriver, short, cannulated
	system diameter 2.1 mm	28310 SL	Same, long
28310 KGL 28310 GGK	Same, long Core Hole Drill, short,	28310 SD	Handle, for use with Screwdrive 28310 SK/SL
	system diameter 2.5 mm	28310 I	Inbus, for use with 28310 IA
28310 GGL 28310 GKL	Same, long Core Hole Drill, long,	28310 IA	Inbus Attachment, for use with 28310 I
	system diameter 2.5 mm	28310 U	Shim, 0.7 mm, package of 10
28310 DK	K-Wire, pyramidal tip, diameter 0.8 mm, length 12 cm, package of 10	28310 UB	Shim, 1.4 mm, package of 10
28310 DG	Same, length 21 cm		
28310 C	Wire Tray, for KÖNIGSBERGER screw set, with removable Screw Tray System 2.5 28310 TRG and Tray System 2.1 28310 TRK, outer dimensions (w x h x d): 480 x 250 x 70 mm		

12-11

ART-HE 5 B 223

Threaded Portals for Arthroscopy



Introduction

Due to the improved technical possibilities and apparatus, wrist and elbow joint arthroscopy has acquired a firm role in everyday clinical surgery of the upper extremities over the last 10 years, without directly competing with other diagnostic equipment or methods. Moreover, a series of proven indications for surgical arthroscopic interventions has arisen in this area.

We have been using arthroscopy on the wrist and elbow joints routinely since 1990, and on the wrist joint in approx. 1,000 cases now. Our technique is based on the method already published by Hempfling, Palmer, and Whipple. For joint dilatation we use an arthropump unit. In all cases, the radio- and ulnocarpal joint is subjected to arthroscopy and, in the event of appropriate pathology, also the midcarpal joint, and in selected cases also the inferior radioulnar joint.

Problem

The following factors are problematic in arthroscopy both of the wrist joint and the elbow joint:

 The risk of the endoscope slipping out of an already established port

Since the layer of soft tissue between the surface of the skin and the joint capsule is only minimal and, on the other hand, the joint capsule is only just beneath the level of the skin, there is a risk of the endoscope slipping out during inspection of the parts of the joint and joint capsule directly to the side of the port. Apart from the annoying need to relocate the original port, which means time is lost, on account of the proximity to a large number of vascular, nerve, and tendon structures, there is also an increase in the risk of concomitant lesions.

2. The necessary good dilatation of the capsule to improve the display of the joint interior

The joint cavity, which is small compared with the knee and shoulder joints and is very complex in some cases, is comparatively awkward to access. To perform a reliable diagnostic arthroscopy and effective arthroscopic interventions it is therefore very helpful to ensure a good expansion of the joint or joint capsule which, apart from distraction, is guaranteed by high intra-articular pressures (higher than 150 mmHg). In the conventional arthrocentesis there is therefore a high

loss of volume with simultaneous pressure loss along the arthroscopic ports, which also causes the surrounding accompanying tissue to inflate.

Conclusion

Due to this problem, threaded portals with a locking mechanism were developed. They are suitable for inserting a conventional endoscope sheath with a telescope and irrigation system, conventional shaver systems, as well as endoscopic instruments (forceps, punches, and scissors).

The threaded portals are characterized by a tapered, blunt screw thread. They are screwed through the skin and subcutaneous tissue to the joint capsule via a blunt trocar tongue, which is introduced into the joint through the established access hole, whereby the first turn of the thread should be intra-articular. Due to the turns of the thread the portal retains itself in the joint capsule and seals it off against the outside simultaneously, i.e. toward the subcutaneous tissue. The usable lumen and the length of the threaded portals were chosen to suit the standard instrument set.

We recommend performing the introduction of the threaded portals under vision via a second arthroscopic port. If necessary, the aperture of the port must be gradually widened using various interchangeable probes or blunt trocar tongues. For standard arthroscopy, we use at least two threaded portals per joint compartment for the telescope and working access.

Summary

Use of the threaded portals in arthroscopy of the wrist and elbow offers the following advantages:

- 1. By sealing off the joint there is much less loss of pressure and volume with a much better expansion of the joint capsule. This proves advantageous in the case of very confined cicatrized joints which have been subjected to previous surgery or which have suffered inflammatory changes, particularly if extensive synovial resections should also become necessary.
- Particularly in the wrist joint the dorsal joint recess, which is very difficult to inspect and the important intercarpal ligaments (SL and LT), can only be assessed reliably by introducing threaded portals because there is no risk of the endoscope slipping out.

1-001

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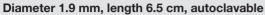


Threaded Portals for Arthroscopy

- 3. Since it is easy and quicker to change the portals and relocate them reliably, the entire complex joint cavity is displayed much more rapidly and reliably and pathological findings can be classified more efficiently. One advantage of the speedy portal changes can be seen in arthroscopic synovialectomy of the entire joint cavity: Here considerable time can be gained.
- 4. Once ports have been established they can be relocated at any time without the risk of any accompanying lesion, particularly if they are in the vicinity of vasomotor bundles (e.g. on the ulnar side of the elbow joint).
- 5. Apart from use as a portal for the standard instrument set, the threaded portal can also be used for arthroscopic interventions even in the case of a high-flow port. Use on other minor joints such as the ankle is also possible.

KÖNIGSBERGER, M. D. Rottweil, Germany





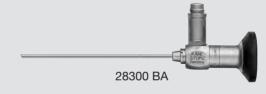




28305 BA

HOPKINS® II Forward-Oblique Telescope 30°, diameter 1.9 mm, length 6.5 cm, autoclavable, fiber optic light transmission incorporated, color code: red

Diameter 2.4 mm, length 10 cm, autoclavable





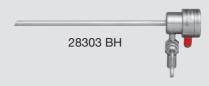
28300 BA

HOPKINS® II Wide Angle Forward-Oblique Telescope 30°, diameter 2.4 mm, length 10 cm, autoclavable, fiber optic light transmission incorporated, color code: red

Arthroscope Sheaths

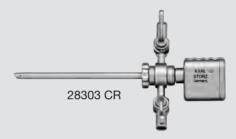


Diameters 3.2 and 3.5 mm, working lengths 6.5 and 8.5 cm respectively, for use with HOPKINS $^{\circ}$ II telescope diameter 2.4 mm, length 10 cm



28303 BH

High-Flow Arthroscope Sheath, with standard coupling mechanism, diameter 3.2 mm, working length 8.5 cm, one stopcock, **fixed,** for use with HOPKINS® II Telescope 30° 28300 BA and Obturators 28302 BU/BV, *color code: red



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28303 CR

Arthroscope Sheath, with automatic lock-in coupling mechanism, diameter 3.5 mm, working length 6.5 cm, two stopcocks, **rotatable,** for use with HOPKINS® II Telescope 30° 28300 BA and Obturators 28302 BU/BV



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28303 DR

Arthroscope Sheath, with standard coupling mechanism, diameter 3.5 mm, working length 6.5 cm, two stopcocks, **rotatable,** for use with HOPKINS® II Telescope 30°, 70° and Obturators 28302 BU/BV, color code: red-yellow





28302 BU

Obturator, sharp, for use with Arthroscope Sheaths 28303 BH/CH/DR/DS/BS/CS/CR/R

28302 BV

Same, blunt

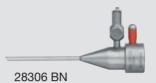
ART-HE 9 B 227

^{*}Note: Here the color code refers to the color code of the HOPKINS® II telescopes, which defines the direction of view and, therefore, the telescope compatible with the arthroscope sheath.

Arthroscope Sheaths



Diameter 2.5 mm, working length 4 cm, for use with HOPKINS® II telescope diameter 1.9 mm, length 6.5 cm



28306 BN

High-Flow Arthroscope Sheath, with standard coupling mechanism, diameter 2.5 mm, working length 4 cm, one stopcock, **fixed,** for use with HOPKINS®II Telescope 30° 28305 BA and Obturators 28306 BS/BT,

*color code: red



28306 BS **Obturator,** sharp, for use with

Arthroscope Sheaths 28306 BN/S

28306 BT Same, blunt

*Note: Here the color code refers to the color code of the HOPKINS® II telescopes, which defines the direction of view and, therefore, the telescope compatible with the arthroscope sheath.





Diameter 5 mm, working length 5 cm, for instruments up to diameter 3.5 mm, working length 13 cm





Size:		5 mm	
Working length:		5 cm	
Color code:		red-yellow	
	KÖNIGSBERGER Trocar with Thread including:	28304 CH	
	Cannula	28304 EB	
	Trocar, with pyramidal tip	28304 DU	
	Automatic Valve	28304 E1	
	KÖNIGSBERGER Trocar with Thread including:	28304 DH	
	Cannula	28304 DA	
	Trocar, with blunt tip	28304 DV	
	Automatic Valve	28304 E1	

Diameter 4.5 mm, working length 2.5 cm, for instruments up to diameter 3 mm, working length 10 cm



4.5 mm	
2.5 cm	
red-yellow	
28304 AH	
28304 EA	
28304 EU	
28304 E1	
28304 BH	
28304 EA	
28304 EV	
28304 E1	

Telescopes for use with trocars size 5 and 4.5 mm see page 226

ARTHROFORCE® III TAKE-APART®Forceps, Scissors and Punches

STORZ - ENDOSKOPE

dismantling

Outer Sheath	Handle		
Inner Sheath	28169 A	28169 AS	
Vorking length 10 cm			
Vorking Attachment	Complete In:	strument	
28083 L	28183 L	28183 LS	
	ARTHROFORCE® III TAKE-APART®	Grasping Forceps, with hook	
28083 G	28183 G	28183 GS	
	ARTHROFORCE® III TAKE-APART®	Grasping Forceps, without hook	
28083 P	28183 P	-	
	ARTHROFORCE® III TAKE-APART®	Biopsy Forceps, straight	
28083 A	28183 A	-	
	BLAKESLEY ARTHROFORCE® III TA straight	KE-APART® Universal Forceps,	
28083 S	28183 S	-	
	ARTHROFORCE® III TAKE-APART®	Scissors, straight	
28083 B	28183 B	-	
	ARTHROFORCE® III TAKE-APART® cutting width 1 mm	Punch, through-cutting, straight,	
28083 MB	28183 MB	-	
	ARTHROFORCE® III TAKE-APART® angled, 15° upwards, cutting width 1	Punch, through-cutting, mm	

ARTHROFORCE® III TAKE-APART® Punches and Forceps



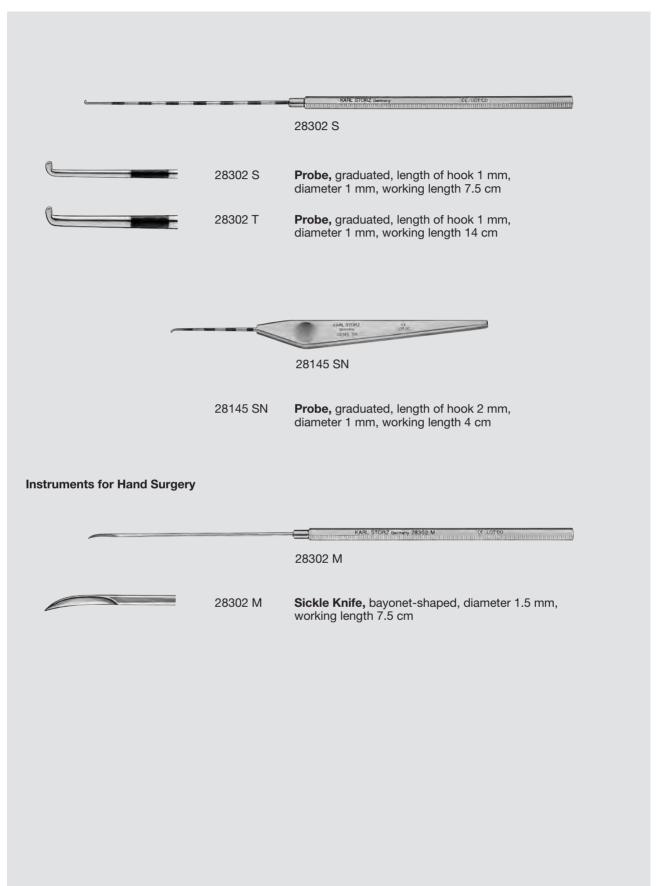
dismantling

Outer Sheath	Handle
Inner Sheath	28169 A
Vorking length 13 cm	
Working Attachment	Complete Instrument
28067 B	28167 B
	ARTHROFORCE® III TAKE-APART® Punch, through-cutting, straight, cutting width 1.4 mm
28067 MB	28167 MB
	ARTHROFORCE® III TAKE-APART® Punch, through-cutting, angled, 15° upwards, cutting width 1.4 mm
28067 A	28167 A
	BLAKESLEY ARTHROFORCE® III TAKE-APART® Universal Forceps, straight

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Probes, Sickle Knives





Microfracture Chisels



Special Features:

- Complete set for treatment of cartilage defects
- May be used for dissection of the corticalis
- Treatment by hand pressure or with a light hammer blow
- Ergonomic handle
- Autoclavable



28728 CG Microfracture Chisel, angled 30°, working length 9 cm

Same, angled 70° 28728 CH

1-031

Provided that an initial order is placed, it is recommended to buy a complete set of instruments.

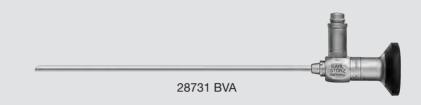
Instruments for Endoscopic Treatment of the Carpal Tunnel Syndrome

STORZ ENDOSKOPE

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, working length 11 cm, autoclavable, fiber optic light connector in line of sight, fiber optic light transmission incorporated,

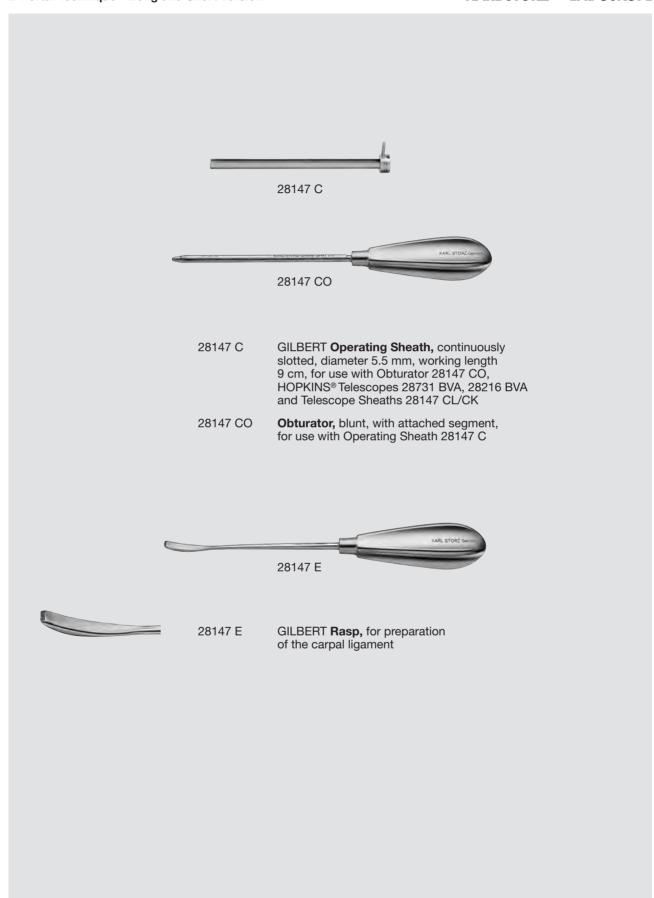
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Instruments for Endoscopic Treatment of the Carpal Tunnel Syndrome

STORZ - ENDOSKOPE

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2-Portal Technique - Long and Short Version

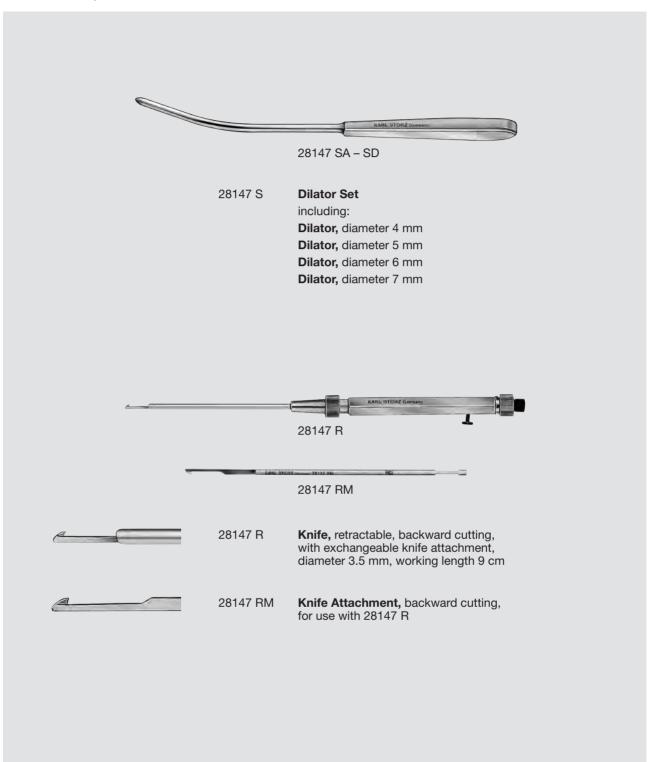


CTS 1 B

Instruments for Endoscopic Treatment of the Carpal Tunnel Syndrome

STORZ ENDOSKOPE

2-Portal Technique



Components/Spare Parts see chapter 14

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

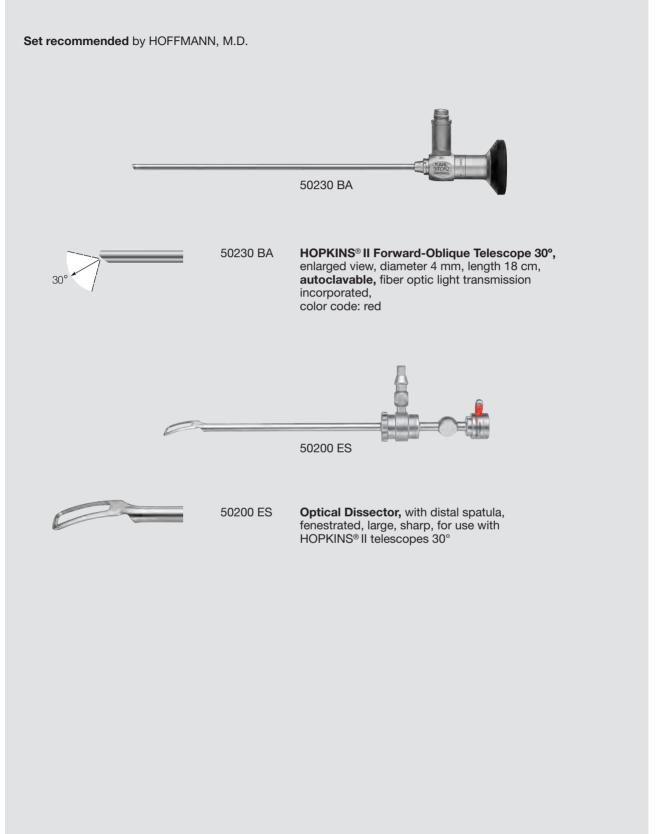
Our experience shows that this technique has been successful in over 100 interventions, is safe and easy to learn and provides an excellent alternative to conventional open procedures.

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

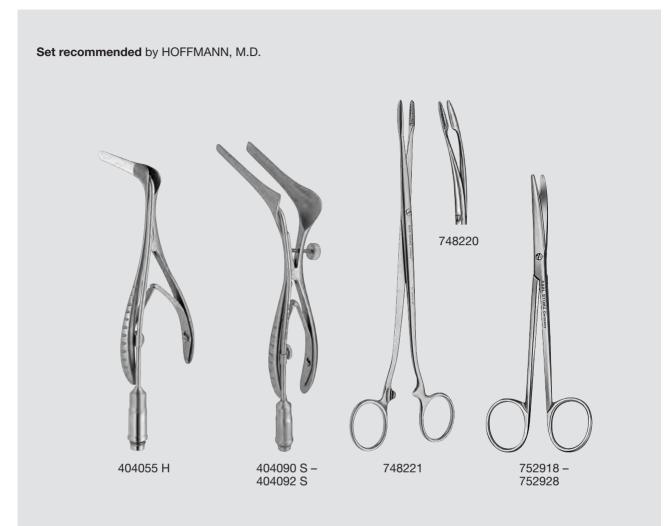
Cubital Tunnel Syndrome





Cubital Tunnel Syndrome





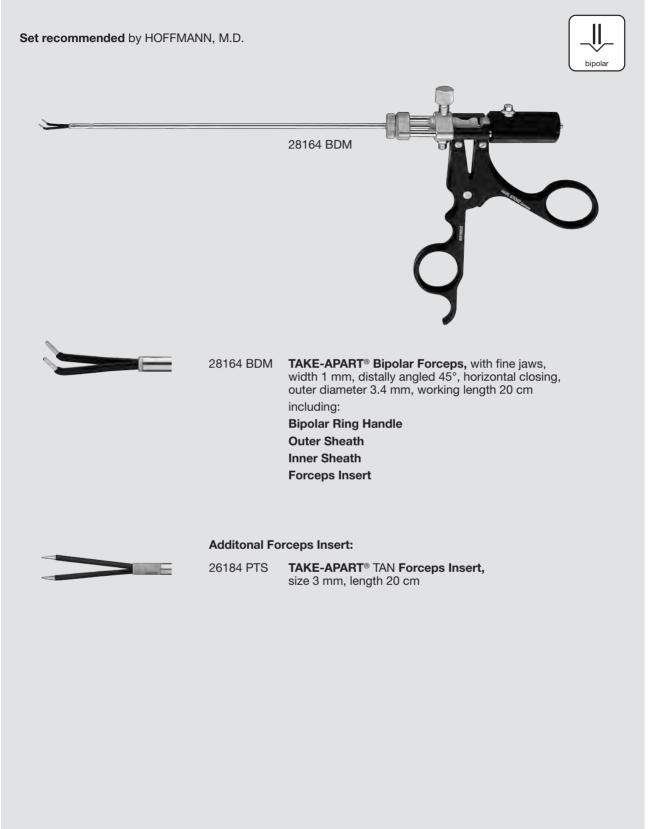
NEW	404055 H	COTTLE Speculum, with fiber optic light carrier, without set screw, special matt finish, blade length 55 mm, length 13 cm
	404090 S	Speculum, with fiber optic light carrier, with set screw, blade length 90 mm, length 13.5 cm
	404092 S	Same, blade length 110 mm
	748220	DUPLAY Dressing and 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

7-071

CTS 5 D 239

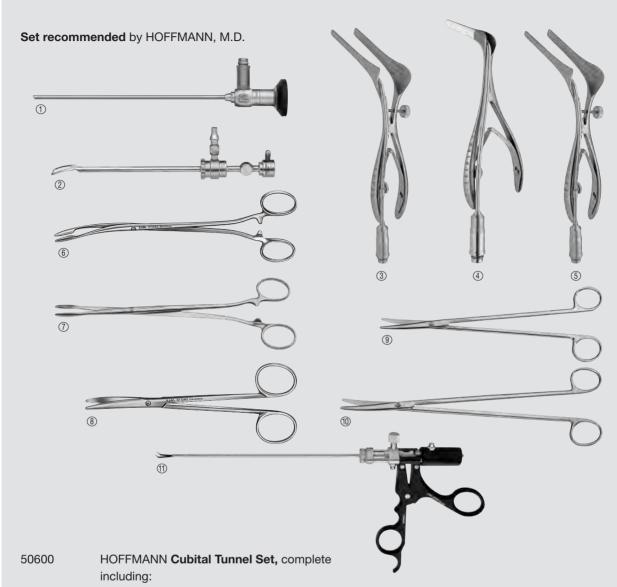
Cubital Tunnel Syndrome





Cubital Tunnel Syndrome





- 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
- 4 COTTLE Speculum, with fiber optic light carrier, without set screw, special matt finish, blade length 55 mm, length 13 cm
 - (§) 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
 - DUPLAY Dressing and Sponge Holding Forceps, straight, with ratchet, length 21 cm
 - ® METZENBAUM Scissors, curved, length 18 cm
 - METZENBAUM Scissors, curved, length 23 cm
 - 10 METZENBAUM Scissors, curved, length 28 cm
 - (1) 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 14

Nerve Compression Syndrome

Endoscopic Decompression and Nerve Transposition for the Treatment of the Peripheral Nerve Entrapment 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 bouge. 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 birdeye'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 Entrapment Syndrome



Set recommended by KRISHNAN, M.D. 28163 RKS 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 Irrigation Sheath 0°, for 28163 RKB/RKS, for use with 28163 RSA 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,

12-11

CTS 9 B 243

color code: red

Nerve Compression Syndrome

Endoscopic Decompression and Nerve Transposition for the Treatment of the Peripheral Nerve Entrapment Syndrome



Set recommended by KRISHNAN, M.D.





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 Bipolar Coagulation Forceps, insulated

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

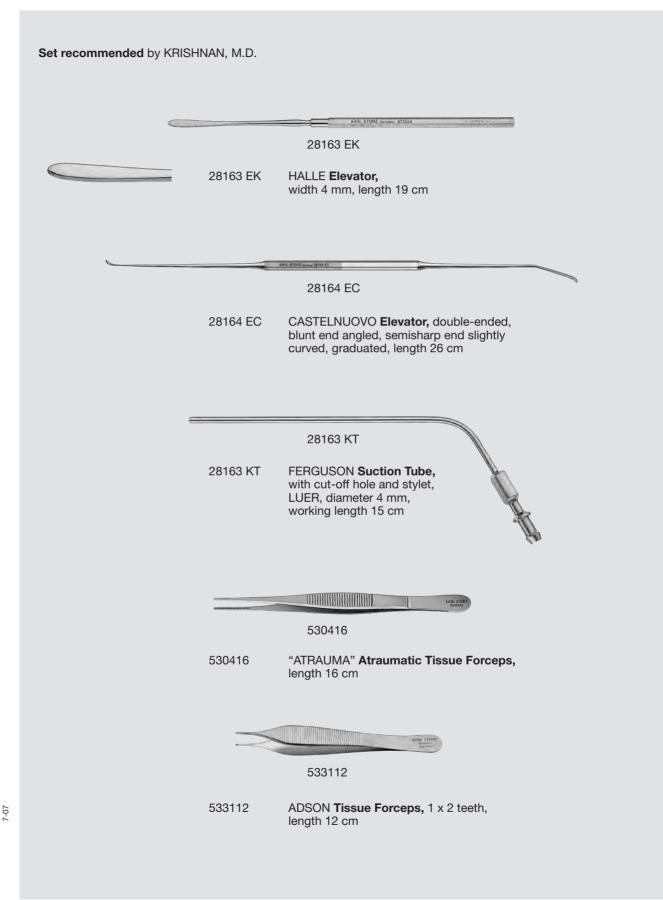


844523 **Bipolar Coagulation Forceps,** insulated, bayonet-shaped, tip 0.7 mm, length 23 cm, for use with Bipolar High Frequency Cords 847000 E or 847000 A/F/M/N/S/T/V

Nerve Compression Syndrome

Endoscopic Decompression and Nerve Transposition for the Treatment of the Peripheral Nerve Entrapment Syndrome



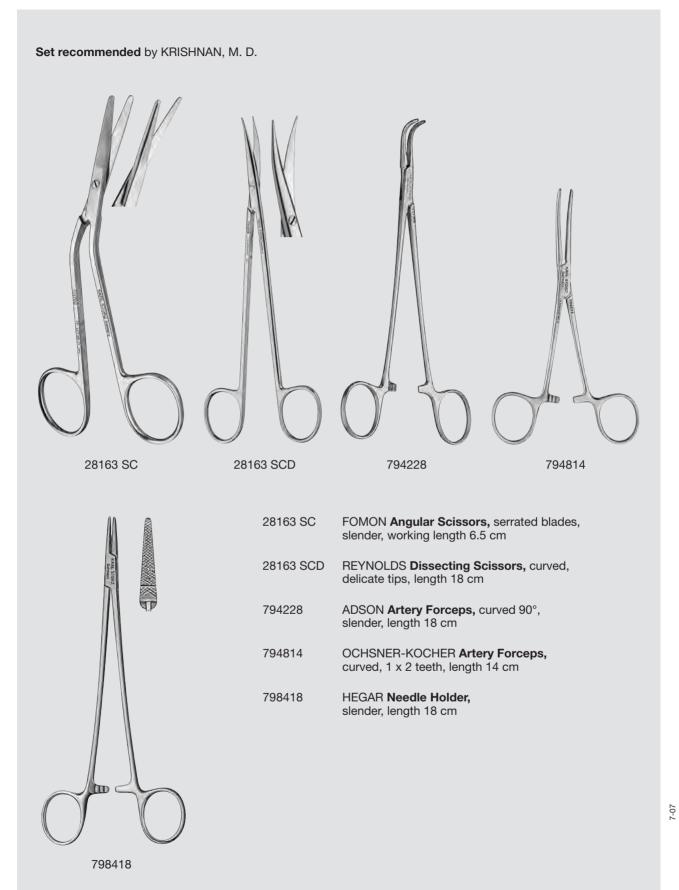


CTS 11 B 245

Nerve Compression Syndrome

Endoscopic Decompression and Nerve Transposition for the Treatment of the Peripheral Nerve Entrapment Syndrome



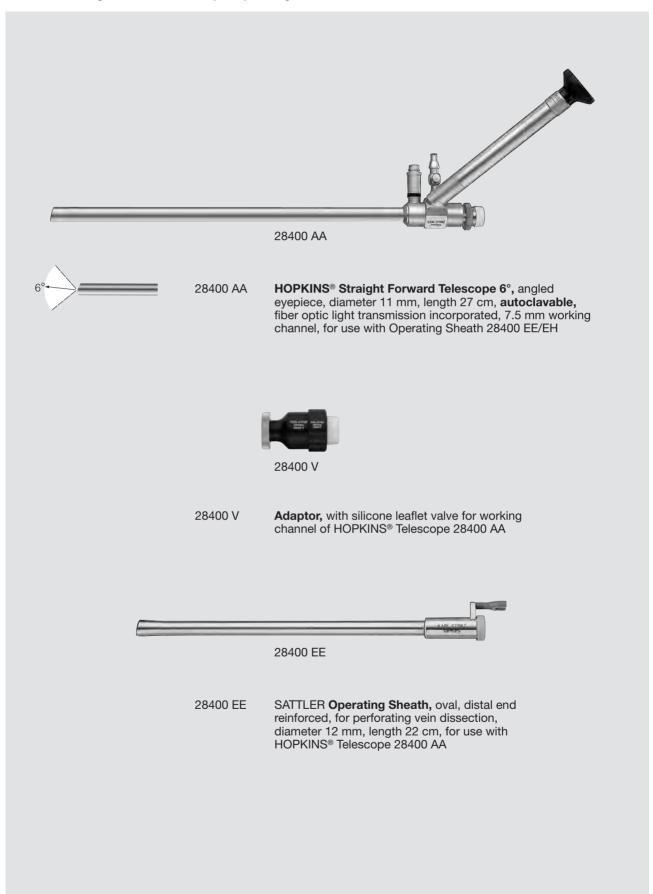


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Endoscopic Nerve Harvest





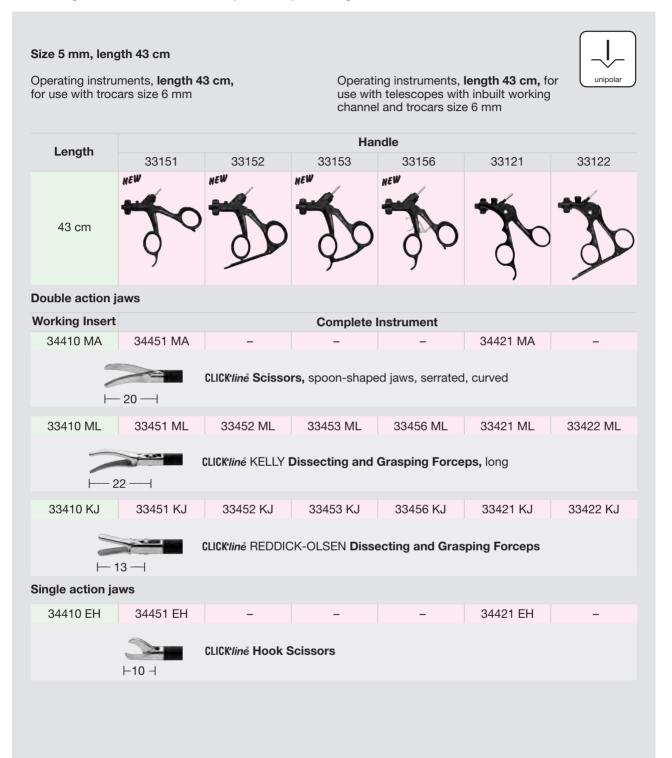


CTS 13 B 247

Endoscopic Nerve Harvest

Scissors, Dissecting and Grasping Forceps, CLICK*line - rotating, dismantling, insulated, with connector pin for unipolar coagulation





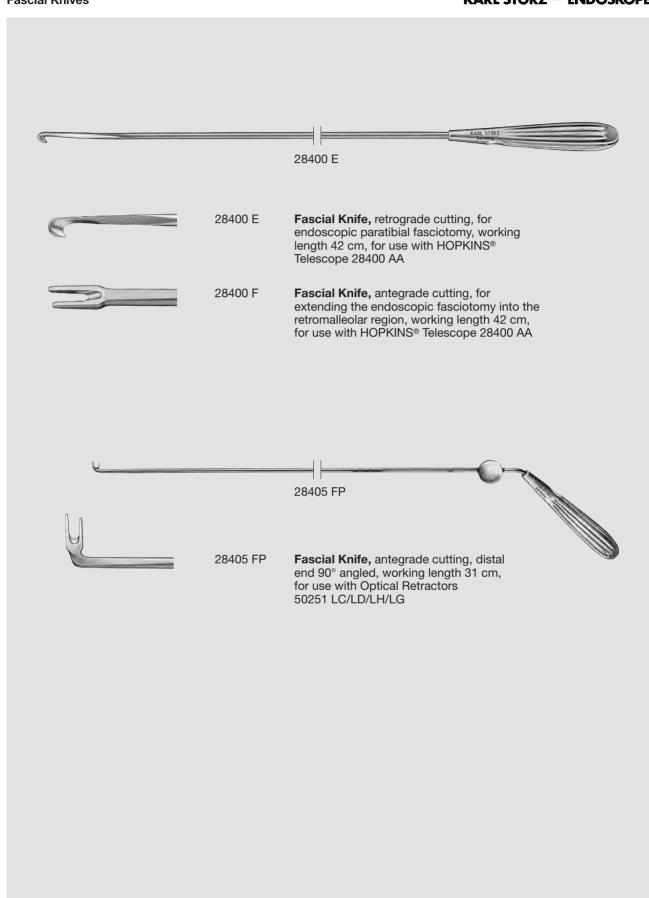
High Frequency Cords for unipolar coagulation see chapter 13, UNITS

248 CTS 14 A

Endoscopic Harvest of Nerves and the Fascia Lata







CTS 15 A

Instrument Set for Establishing ^M a Blood Barrier





28051 M **Rollable Cuff,** 55 x 9 cm, for restricting the blood flow, including manometer



Mechanical Holding Systems

with 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



Mechanical Holding Systems







Socket	Articulated Stand					
28172 HK	2827	2 HA	2827	2 HB	2827	2 HC
28172 HR	- C		A B		- B	
	A 30 cm	В -	_ II A 48 cm	B 15 cm	_ I I A 48 cm	B 15 cm
	C 20 cm	D 17 cm	C 20 cm	D 17 cm	C 27 cm	D 24 cm
Olamania a Java		Ostala a au			li	
Clamping Jaw	28272		mber for the o		aing system 28272	KGC
28272 UGN		RGA	28272		28272	
			th axial intake, , clamping rang			ed
00070 11(A)	28272	2 KKA	28272	2 KKB	28272	KKC
28272 UKN	28272	2 RKA	28272	2 RKB	28272	? RKC
			th axial intake,		nstrument, ip to 12.5 mm	
	irrigation an	d telescope s	neaths, clampi	ng range 4.6 t		
20070.111		d telescope si		2 KLB	28272	2 KLC
28272 UL		2 KLA	28272		28272 28272	
28272 UL	28272	2 KLA 2 RLA	28272	2 KLB 2 RLB	28272	
	28272 28272 Clamping J	2 KLA 2 RLA	28272 28272 , clamping ranç	2 KLB 2 RLB	28272	? RLC
	28272 28272 Clamping J	2 KLA 2 RLA aw, universal,	28272 28272 , clamping rang 28272	2 KLB 2 RLB ge 0 up to 18 i	28272 mm	RLC RLC



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.

ENDOCRANE® Holding System



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

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

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

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

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

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

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

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



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254 HT 2

ENDOCRANE® Holding System



Product Features

Safety

The fail-safe function of the ENDOCRANE® prevents loss of retention force and ensures that the arm does not collapse in case of malfunction.

Accuracy

ENDOCRANE® offers accurate positioning without misalignment. This is indispensable for critical applications such as neurosurgery.

Speed

The piezoelectric principle enables the joints of the ENDOCRANE® to close in 30 ms and ensures a holding force of 20 N in all positions.

Convenience

The ENDOCRANE® system allows single-handed use via the handle.

Flexibility

ENDOCRANE® is equipped with the proven KARL STORZ rapid coupling, which ensures fast and secure mounting of various clamping jaws. The ENDOCRANE® handle also has a manual ball joint to allow convenient fine adjustment.

Hygiene

The ENDOCRANE® holding arm is equipped with a sterile cover during use. This guarantees 100% hygiene as well as safety and ensures that the system is in continuous use.







ENDOCRANE® Holding System ^{N€W}





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



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Components/Spare Parts see chapter 14

2-11

256 HT 4

ENDOCRANE® Holding System





	28272 UGN	Clamping Jaw, metal, with axial intake, 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, with axial intake, 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.
* mtp	040146-25*	Cover, sterile, package of 25

Specifications:

Arm:		Control Unit:	
Maximum holding capacity	2 kg/20 N	Power supply	100 – 240 VAC
Working radius	500 mm/19.7"	Mains frequency	50/60 Hz
Swivel range	360°	Weight	5 kg/11.0 lbs
Maximum locking time	30 ms (fail-safe)	Dimensions (w x h x d)	305 x 80 x 305 mm
Weight of holding arm and stand	7 kg/15.4 lbs		
Protection against electric shock	type B		
Type of protection	IP 40		



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Specifications subject to change without notice.



The POINT SETTER® holding system is the perfect solution for positioning endoscopes as well as cameras,

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.

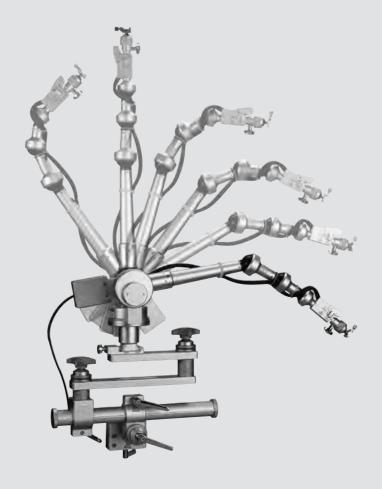
Furthermore, the POINT SETTER® holding arm allows convenient single-handed use. Pressing and holding the control button on the handle releases the arm for quick and accurate positioning. The POINT SETTER® arm locks as soon as the button is released.

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:

retractors or other instruments.

- The self-locking pneumatic system ensures that low, fluctuating or deficient gas pressure does not affect the stability of the arm.
- A press of a control button releases the arm immediately for quick positioning.
- Side guards prevent accidental activation of the POINT SETTER® arm.
- A locking mechanism offers additional safety.
- A manual ball joint at the tip of the handle enables convenient fine-tuning.
- Special surface structure for uniform and smooth movement as well as accurate positioning.
- Precise positioning without forward or backward motion.
- The POINT SETTER® arm is very robust and has high torsional stiffness to ensure low oscillation and high reliability.



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258 HT 6



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.

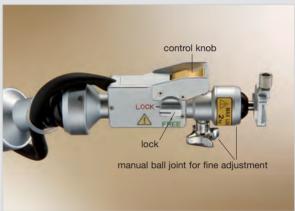
Balanced System

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.











28172 WKS

28172 WKS POINT SETTER®, pneumatic holding arm

including:

POINT SETTER® Holding Arm, with OR table adaptor

KSLOCK Adaptor, for clamping jaws

Clamping Jaw, large

Clamping Jaw, small

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 263 and add it to your order.

Specifications subject to change.

Components/Spare Parts see chapter 14

2-11

260 HT 8





	28172 T	OR Table Adaptor, light version for POINT SETTER® holding arm, no POINT SETTER® arm included
A District of the state of the	28272 UA	POINT SETTER® KSLOCK Adaptor, for POINT SETTER® holding system, for connecting KARL STORZ clamping jaws and accessories
	28272 UGN	Clamping Jaw, metal, with axial intake, 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, with axial intake, 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)

HT 9 261



Spare Parts and Accessories

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®



	28172 WA	Connecting Tube, for POINT SETTER®, Dräger, length 600 cm
	28172 WB	Connecting Tube, for POINT SETTER®, Dräger air motor, length 600 cm
	28172 WC	Connecting Tube, for POINT SETTER®, compressor, length 600 cm
	28172 WN	Connecting Tube, for POINT SETTER®, Schrader, length 600 cm
	28172 WO	Connecting Tube, for POINT SETTER®, with open end, length 600 cm
ccessories and Expendable Materi	als	
	20 0310 02 20 0310 02 C	Air Compressor, for POINT SETTER®, 0 – 8 bar, power supply 230 VAC, 50/60 Hz, Dimensions (w x d x h): ca. 500 x 320 x 340 mm, weight appr. 22 including: Fabric Reinforced Tube, for connecting CALCUSPLIT® SCB 27 6300 20 Connecting Tube, length 600 cm, for use with POINT SETTER® holding system, required pressure setting min. 6 to max. 8 bar Same, power supply 115 VAC, 50/60 Hz
	2761291	Pressure Regulator, 7 bar, for POINT SETTER®, must be used for pressure > 8 bar on supply line
	2761291 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

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STOR-E® Transport Cart

for POINT SETTER® Holding Arm



With the aid of the transport cart, the POINT SETTER® holding system can be easily transported into the OR. The components of the POINT SETTER® holding system are safely suspended from the cart at a convenient height. This enables easy and quick mounting to standard OR table rails.

Special Features:

- Mobile and safe storage of the POINT SETTER® holding arm
- Faster installation and readiness of the POINT SETTER® for immediate use in the OR

• Offers space for the POINT SETTER® with standard OR table adaptor, connecting tube, sterile covers and small parts



20 0200 83 STOR-E® Transport Cart, for POINT SETTER® holding arm

including:

Subrack, for POINT SETTER®

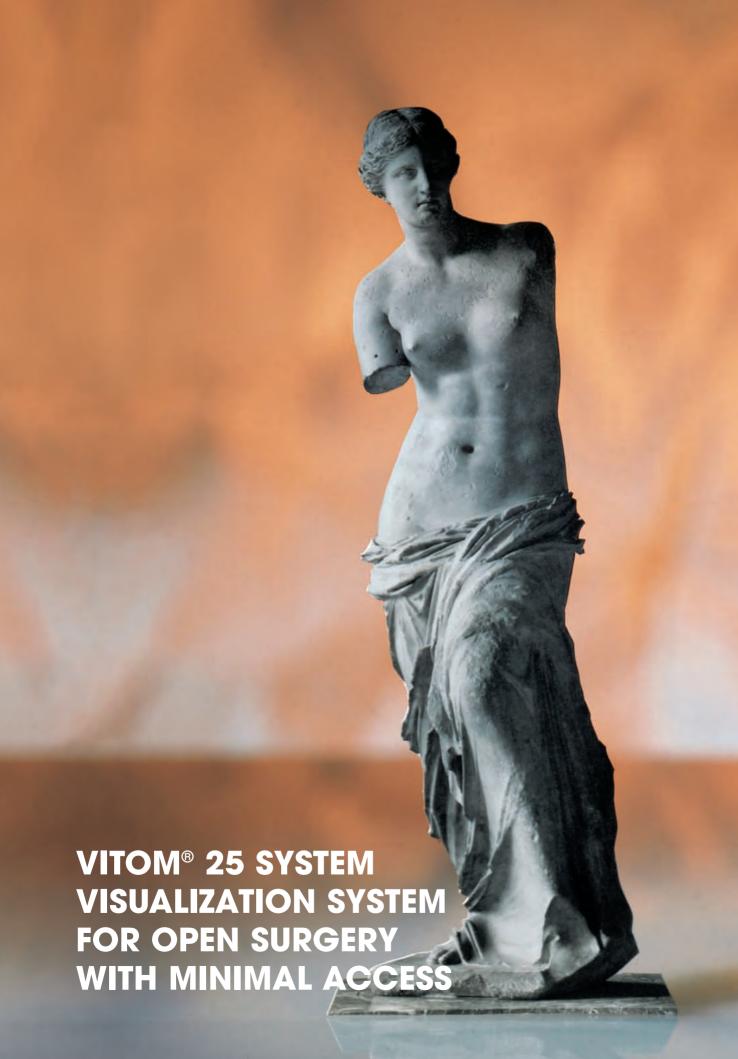
Accessory Set, for POINT SETTER®

Top Cover

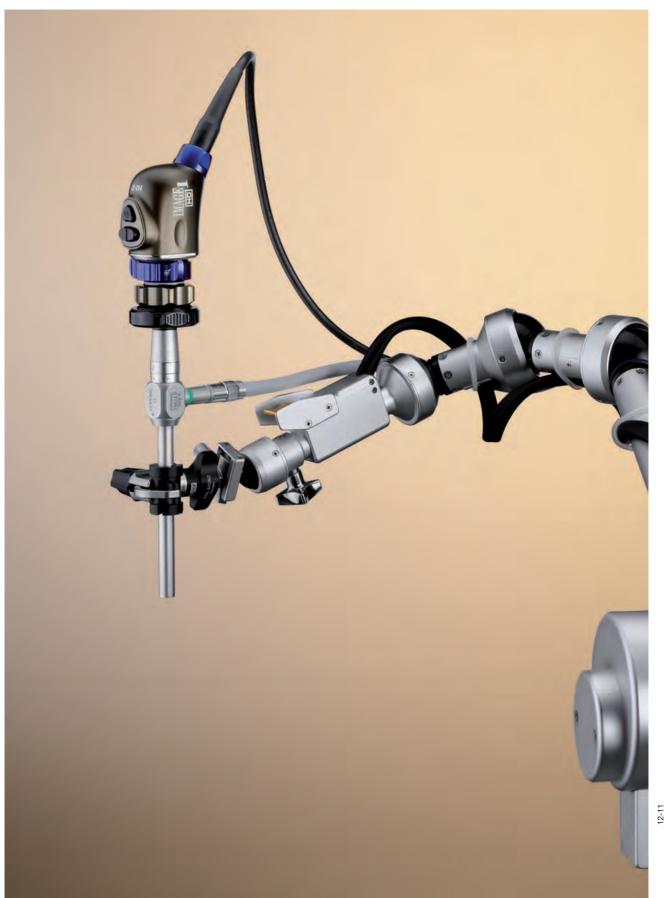
Wire Basket

Components/Spare Parts see chapter 14

264 HT 12







Visualization System for Open Surgery with Minimal Access



VITOM® 25 from KARL STORZ represents a revolutionary and innovative way of displaying open surgery with minimal access in a high quality and ergonomic manner.

VITOM® 25 is based on the renowned HOPKINS® II rod lens system from KARL STORZ. With the help of a holding system, the VITOM® 25 is placed at a working distance of 25 – 60 cm above the surgical field. This gives the surgeon more room to work.

The small size of the VITOM® 25 reduces space requirements in the OR to a minimum. Due to its slim and compact design, the surgical field is not obstructed and even long instruments can be used with ease. The VITOM® 25 system provides excellent depth of field, optimal magnification, good contrast and excellent color reproduction, which are the requisites for FULL HD display and recording.

The first-class enhanced imaging can be observed via a FULL HD monitor from a convenient distance by the surgeon, the assistant as well as the entire OR team.

The VITOM® 25 system has proven to be an excellent alternative to OR illumination cameras, loupes or operating microscopes in various surgical disciplines.

The VITOM® 25 is equipped with an integrated illumination, which can be supplemented with an optional illuminator.

The system allows further use of existing units. A FULL HD endoscope imaging solution from KARL STORZ can also be used with the VITOM® 25 exoscope.

The VITOM® 25 system offers:

- Excellent FULL HD image quality
- Great depth of view
- Large working distance
- Ergonomic monitor work

- Compact design requiring minimal space in the OR
- Use of existing KARL STORZ FULL HD endoscopy system possible



Using the VITOM® 25 system in hand surgery

OR photographs courtesy of: Prof. Dr. Christophe Mathoulin, Institut le la Main, Clinique Jouvenet, Paris, France

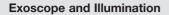
2-11

VITOM 3



System Overview







VITOM® 25 Exoscope and Light Cable



VITOM® 25 Illuminator and Y-Light Cable (optional)



XENON 300 SCB Light Source

Camera System and Monitor



IMAGE1 H3-Z Three-Chip HD Camera Head



IMAGE 1 HUB™ HD Camera Control Unit



IMAGE 1 HUB™ HD Monitor

Holding System



POINT SETTER® Pneumatic Holding Arm



or

ENDOCRANE® Piezoelectric Holding Arm



or

Mechanical Holding Arm

Documentation System



KARL STORZ AIDA® compact NEO advanced

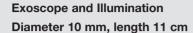
Units and Transport Carts

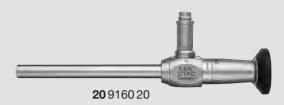
Equipment Cart 29005 DRB Transport Cart for POINT SETTER® 20 0200 83

For further information see catalog TELEPRESENCE











VITOM® 25 HOPKINS® II Straight Forward Telescope 0°, 20916020

working distance 25 - 60 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

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



20 9180 20

20 9180 20

VITOM® 25 Distance Rod, length 25 cm

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VITOM 5 269



optional:



20 9170 00

20 9170 00

VITOM® 25 Illuminator, for straight forward telescopes 0°, 2 adjustable lenses with holding device for VITOM® 25, autoclavable

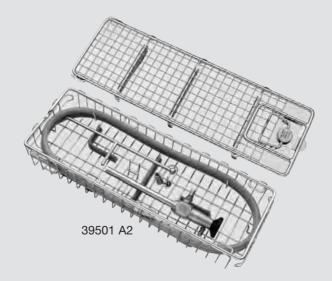
Y-Fiber Optic Light Cable 495 UV recommended



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

Wire Tray for Cleaning, Sterilization and Storage of two rigid endoscopes and one light guide cable, including holder for light post adaptors, silicone telescope holders and lid, external dimensions (w x d \dot{x} h): 352 x 125 x 54 mm, for rigid endoscopes up to diameter 10 mm and working length 20 cm

VITOM® 25





25 – 60 cm	
25 cm approx. 3.5 c	50 cm m approx. 7 cm
25 cm 5 cm 3.5 cm	50 cm 10 cm 7 cm
25 cm	50 cm
approx. 8x	approx. 4x
approx. 16x	approx. 8x
approx 14x	approx. 7x
approx. 28x	approx. 14x
approx. 17x	approx. 8x approx. 16x
	25 cm approx. 3.5 cm 25 cm 5 cm 3.5 cm 25 cm approx. 8x approx. 16x approx. 14x approx. 28x



Spine surgery with the VITOM® 25 system

Technical specifications are subject to change.

OR photographs courtesy of: Dr. K. Siddique, Cedars-Sinai Medical Center, Los Angeles, CA 90048, USA

VITOM® 25

System Components



Cold Light Fountain XENON 300 SCB

Special Features:

- Extremely high light intensity due to 300 Watt Xenon lamp
- Built-in antifog pump
- With integrated KARL STORZ Communication Bus (KARL STORZ-SCB)



20 1331 01-1 Cold Light Fountain XENON 300 SCB

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

Mains Cord

Silicone Tubing Set, length 250 cm SCB Connecting Cable, length 100 cm

Specifications:

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

Dimensions w x h x d	305 x 165 x 335 mm
Weight	7.96 kg
Certified to:	IEC 601-1 and UL 544, protection class 1/CF

Spare Lamps and Spare Lamp Modules for Cold Light Fountains XENON and Components/Spare Parts see catalog TELEPRESENCE





IMAGE1 FULL HD Camera Head for Endoscopy and Microscopy

For use with IMAGE 1 HUB™ HD Camera Control Unit SCB 22 2010 11U102



NEW 22 22 20 0 55-3 **50 Hz IMAGE1 H3-Z**

60 Hz Three-Chip FULL HD Camera Head

max. resolution 1920 x 1080 pixels, progressive scan, soakable, gas- and plasma-sterilizable, with integrated Parfocal Zoom Lens, focal length $f=15-31\,$ mm (2x), 2 freely programmable camera head buttons, for use with color systems **PAL/NTSC**

Accessories

040112-40* Camera Cover, folded inside out, 13 x 242 cm, sterile,

package of 25, for use with all standard endoscopic

video camera systems

040112-160* **Same,** package of 160

533 TVA Adaptor, autoclavable, permits telescope changing

under sterile conditions



533 TVA

Specifications:

IMAGE1 FULL HD Camera Head	Н3-Z	
50/60 Hz	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 l)	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	



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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.

o jack plug (ACC 1, ACC 2)

1 HUB™ HD with ICM) (2x)



22 2010 11U102 IMAGE 1 HUB™ HD Camera Control Unit SCB, with SDI Module

for use with IMAGE1 FULL HD and IMAGE1 standard one- and three-chip camera heads, max. resolution 1920 x 1080 pixels, with integrated SDI (Serial Digital Interface) module, KARL STORZ-SCB and integrated 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 at 6-pin Mini-DIN socket (2x)
AGC	Microprocessor-controlled	- 3.5 mm stereo jack plug (AC) - Serial port at RJ-11	- 3.5 mm stereo jack plug (ACC 1, ACC
Video Output	- FULL HD signal to DVI-D socket (2x) - SDI signal to BNC socket (only IMAGE 1 HUB™ HD with SDI module) (2x)		- USB port (only IMAGE 1 HUB™ HD with ICM) (
	- RGBS signal to D-Sub socket - S-Video signal to 4-pin Mini-DIN socket (2x)	Dimensions w x h x d	305 x 89 x 335 mm
		Weight	3.35 kg
	- Composite signal to BNC socket	Power supply	100-240 VAC, 50/60 Hz
Input	Keyboard for title generator, 5-pin DIN socket	Certified to:	IEC 601-1, 601-2-18, CSA 22.2 No. 601, UL 2601-1 and CE acc. 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

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Larger KARL STORZ FULL HD Monitors see catalog KARL STORZ OR1 NEO™ **Video Connecting Cables** see catalog TELEPRESENCE

VITOM 11 275





KARL STORZ WIDEVIEW™ HD Monitors



9524 N/NO 9526 N/NO



9524 NB/NBO 9526 NB/NBO

KARL STORZ HD Flat Screens	2	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)

The systems can be operated with KARL STORZ-SCB units. Video Connecting Cables see catalog TELEPRESENCE





28172 WKS

28172 WKS **POINT SETTER®**, pneumatic holding arm

including:

POINT SETTER® Holding Arm, with OR table adaptor

KSLOCK Adaptor, for clamping jaws

Clamping Jaw, large

Clamping Jaw, small

Clamping Jaw, for fiberscopes **Pressure Regulator,** 7 bar

Drape, for single use, sterile, package of 10

28272 CN Clamping Cylinder, folding, for flexible mounting

of 10 mm telescopes on the telescope sheath, **autoclavable.** The clamping cylinder allows vertical movement and rotation of the telescope.

28172 WD **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 278 and add it to your order.

For further information on the POINT SETTER® Holding System see chapter 10, HOLDING SYSTEMS Components/Spare Parts see chapter 14

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VITOM 13 277





POINT SETTER® Holding System

Alternative and Spare Connecting Tubes

28172 WA	Connecting Tube, for POINT SETTER®, Dräger, length 600 cm
28172 WB	Connecting Tube, for POINT SETTER®, Dräger air motor, length 600 cm
28172 WC	Connecting Tube, for POINT SETTER®, compressor, length 600 cm
28172 WN	Connecting Tube, for POINT SETTER®, Schrader, length 600 cm
28172 WO	Connecting Tube, for POINT SETTER®, with open end, length 600 cm

Accessories and Expendable Materials

	20 0310 02 20 0310 02 C	Air Compressor, for POINT SETTER®, 0 – 8 bar, power supply 230 VAC, 50/60 Hz, Dimensions (w x d x h): ca. 500 x 320 x 340 mm, weight appr. 22 kg including: Fabric Reinforced Tube, for connecting CALCUSPLIT® SCB 27 6300 20 Connecting Tube, length 600 cm, for use with POINT SETTER® holding system, required pressure setting min. 6 to max. 8 bar Same, power supply 115 VAC, 50/60 Hz
	2761291	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.
C	28272 ECW	Spring Balance, loading capacity 25 N
	28172 WD	Drape, for single use, sterile, package of 10

For further information on the POINT SETTER® Holding System see chapter 10, HOLDING SYSTEMS Components/Spare Parts see chapter 14





ENDOCRANE® Holding System



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

28272 UGN **C**

Clamping Jaw, metal, with axial intake, 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 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.



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For further information on the ENDOCRAN® Holding System see chapter 10, HOLDING SYSTEMS Components/Spare Parts see chapter 14

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VITOM 15 279





Mechanical Holding System

28272 HC

28272 HC Articulated Stand, L-shaped, long, reinforced version, only, especially large swivel range, with one mechanical central

clamp for all five joint functions, height 48 cm, swivel range 66 cm, with quick release coupling KSLOCK (female)

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

28272 UGN Clamping Jaw, metal, with axial intake, 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 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.

Further Articulated Stands see chapter 10, HOLDING SYSTEMS



System Components



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.

System Components



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 - S-Video (Y/C)		Audio Formats	- WAV
	 Composite RGB (only standard) SD-SDI (only standard) HD-SDI (only standard) DVI-D (only advanced) 	Storage Media	- DVD+R - DVD+RW - DVD-R - DVD-RW - CD-R
Image Formats	- JPG - BMP		- 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™

12-11

VITOM 19 283



System Components



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

Components/Spare Parts see catalog TELEPRESENCE



System Components



Equipment Carts



29005 DRB Equipment Cart

including:

basic equipment cart, rides on 4 antistatic dual wheels, 2 equipped with locking brakes (rear), 3 fixed shelves, 1 with push handles, mains switch in side boom, 1 drawer unit with lock, integrated cable conduits in both vertical beams, 1 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 winding on the outside, 1 camera holder, 2 equipment rails sidewise

Dimensions:

Equipment Cart: 730 x 1490 x 716 mm (w x h x d),

Shelf: 630 x 480 mm (w x d), Caster diameter: 150 mm

Accessories:

29005 MHB

Monitor Arm, height adjustable, swiveling and tilting, central mount, swivel range approx. 210°, loading capacity max. 18 kg, with monitor holder VESA 75/100, for use with Equipment Cart

29005 BAS/DRB and 29003 LCG

29005 MZD

Monitor Holding Arm, height and side adjustable, swiveling and tilting, central mount, swivel range 360°, reach 300 mm, loading capacity max. 15 kg, with monitor holder VESA 75/100, with integrated cable conduit, for use with Equipment Cart 29005 DRB

29005 TBG

Isolation Transformer, 230 VAC, 2000 VA, with 8 special mains socket expulsion fuses, 8 grounding plugs, for Equipment Carts 29005

BAS/DRB/LAP/GU

29003 IW

Earth Leakage Monitor, for use with Isolation Transformer 29003 TBK and 29005 TBG

29005 KKM I

Mains Cord, length 100 cm, with cold device

plug and socket, with UL approval



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 14

VITOM 21 285



Direct Adaption





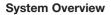


Direct adaption to the VARIO operating microscope from Carl Zeiss Meditec

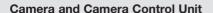
With the operating microscope the surgeon always has a perfect view of the operating field. Assistants, OR nurses and students, however, often experience poor video presentation, especially if FULL HD visualization is not available. KARL STORZ offers solutions from one source that equip operating microscopes from leading manufacturers with advanced FULL HD technology. To achieve optimal results, all components in the video chain – from the camera system to the monitor – must be of the highest quality.

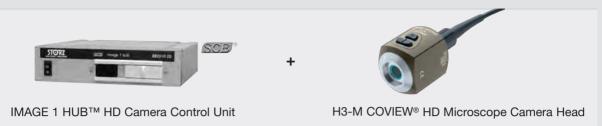
The most straightforward and professional connection between the camera and the microscope is the so-called direct adaption.

Here the H3-M COVIEW® microscope camera and the corresponding QUINTUS® TV adaptor are directly connected to the microscope via the C-MOUNT connection.









TV Adaptors



HD Monitor and ZeroWire



Documentation System



Accessories

Equipment Cart 29005 DRB

System Components



H3-M HD Microscope Camera Head



For use with IMAGE 1 HUB™ HD Camera Control Unit SCB 22 2010 11U1xx and IMAGE1 HD Camera Control Unit SCB 22 2020 11U1xx



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

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System Components



IMAGE 1 HUB™ HD Camera Control Unit





22 2010 11U1 IMAGE 1 HUB™ HD Camera Control Unit SCB

for use with IMAGE1 FULL HD and IMAGE1 standard one- and three-chip camera heads, max. resolution 1920 x 1080 pixels, with integrated **KARL STORZ-SCB** and integrated digital Image Processing Module, color systems PAL/NTSC, power supply 100 – 240 VAC, 50/60 Hz

including:

Mains Cord

BNC/BNC Video Cable

S-Video (Y/C) Connecting Cable

Special RGBS Connecting Cable

2x Connecting Cable, for controlling peripheral units

DVI-D Connecting Cable

SCB Connecting Cable

Keyboard, with US English character set

22 2010 11 U102 IMAGE 1 HUB™ HD Camera Control Unit SCB, with SDI Module

for use with IMAGE1 FULL HD and IMAGE1 standard one- and three-chip camera heads, max. resolution 1920 x 1080 pixels, with integrated SDI (Serial Digital Interface) module, KARL STORZ-SCB and integrated Image Processing Module, color systems PAL/NTSC, power supply 100 – 240 VAC, 50/60 Hz

including:

Mains Cord

BNC/BNC Video Cable

S-Video (Y/C) Connecting Cable

Special RGBS Connecting Cable

2x Connecting Cables, for controlling peripheral units

DVI-D Connecting Cable

SCB Connecting Cable

Keyboard, with US English character set

Components/Spare Parts see catalog MICROSCOPY

System Components



IMAGE 1 HUB™ HD Camera Control Unit





NEW

22 2010 11U112 IMAGE 1 HUB™ HD Camera Control Unit SCB, with SDI/ICM module

for use with IMAGE1 FULL HD and IMAGE1 standard one- and three-chip camera heads, max. resolution 1920 x 1080 pixels, with integrated ICM (Image Capture Module) and SDI (Serial Digital Interface) modules, KARL STORZ-SCB and digital Image Processing Module, color systems PAL/NTSC, power supply 100 – 240 VAC, 50/60 Hz

including:

Mains Cord

BNC/BNC Video Cable

S-Video (Y/C) Connecting Cable

Special RGBS Connecting Cable

2x Connecting Cable, for controlling peripheral units

DVI-D Connecting Cable

SCB Connecting Cable

Keyboard, with US English character set

2x KARL STORZ USB Flash Drive, 4 GB





22 2020 11U110 IMAGE1 HD Camera Control Unit SCB, with ICM module

for use with IMAGE1 FULL HD three-chip camera heads, max. resolution 1920 x 1080 pixels, with integrated ICM (Image Capture Module), KARL STORZ-SCB and digital Image Processing Module, power supply 100-240 VAC, 50/60 Hz

including:

Mains Cord

2x Connecting Cable, for controlling peripheral units

DVI-D Connecting Cable

SCB Connecting Cable

Keyboard, with US English character set

2x KARL STORZ USB Flash Drive, 4 GB

Components/Spare Parts see catalog MICROSCOPY

System Components



IMAGE 1 HUB™ HD Camera Control Unit



Specifications:

Signal-to-noise ratio	IMAGE 1 HUB™ HD, three-chip camera systems ≥ 60 dB		
AGC	Microprocessor-controlled		
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		
Input	Keyboard for title generator, 5-pin DIN socket		

Control output/input	- KARL STORZ-SCB to 6-pin socket Mini-DIN socket (2x) - 3.5 mm stereo jack plug (ACC 1, ACC 2), - Serial port at RJ-11 - USB port (only IMAGE 1 HUB™ HD with ICM) (2x)
Dimensions w x h x d	305 x 89 x 335 mm
Weight	3.35 kg
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 acc. to MDD, protection class 1/CF defibrillation-safe

ICM: 2x USB outputs (1x printer output on rear panel, 1x storage medium on the front panel)

SDI: 2x outputs

Additional Modules:



Serial Digital Interface

optimized for medical display on flat screens, routing with OR1™ and digital recording with AIDA-DVD-M

ICM

USB connection for recording still images and video sequences on a USB storage medium or to connect to a USB printer for printing recorded still images directly.

Compatible printers:

KARL STORZ USB Printer 549 M

Recommended storage media:

KARL STORZ 4 GB USB Flash Drive 20 0402 81





Optional accessories for IMAGE 1 HUB™ HD Camera Control Unit and Camera Heads



			<u>HU</u> —
		20 2002 31 20 2002 31F 20 2002 31I 20 2002 31P 20 2002 31S 20 2002 31U	Keyboard, with German character set, PS/2 connector, including AT-adaptor and protective cover Same, with French character set Same, with Italian character set Same, with Portuguese character set Same, with Spanish character set Same, with US English character set
	NEW	20 0402 33	Medical Silicone Keyboard CLINBOARD, with German character set, PS/2 connector, with antibacterial coating, washable, disinfectable
	NEW	22 2200 72	IMAGE 1 HUB™ HD Extension Cable, length 520 cm, for use with IMAGE1 HD camera heads (except H3-M/H3-M COVIEW® FULL HD microscope camera heads)
\$ 17 W		22 2001 70	IMAGE1 SD Extension Cable, length 760 cm, for use with IMAGE1 standard camera heads
	NEW	22 2200 70	IMAGE1 HD Camera Head Cable, length 300 cm, for use with H3-M/H3-M COVIEW® FULL HD Microscope Camera Heads 22 2200 54-3 and 22 2201 54-3 (spare part)
	NEW	22 2200 71	IMAGE1 HD Camera Head Cable, length 900 cm, for use with H3-M/H3-M COVIEW® FULL HD Microscope Camera Heads 22 2200 54-3 and 22 2201 54-3 (spare part)
	NEW	container.	Plastic Container for Sterilization and Storage of camera heads IMAGE1 H3-Z, H3-ZA and H3-FA, autoclavable, suitable for use with steam, gas and hydrogen peroxide sterilization, Sterrad® compatible, external dimensions (w x d x h): 385 x 255 x 75 mm The instrument displayed is not included in the plastic
		Only camera for steam ste	heads marked "autoclave" can be placed in the tray rilization. One-Pedal Footswitch, one-stage, for freeze frame or video recording in combination with IMAGE 1 HUB™ 22 2010 20-110/-112 and 22 2000 20-112
		20 2330 70	Adaptor ACC 1, for Footswitch 20 0141 30

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System Components



QUINTUS® - High-Performance TV Adaptor for Operating Microscopes

Unleash the full performance of your operating microscope from CARL ZEISS MEDITEC – with FULL HD imaging solutions from KARL STORZ

The new QUINTUS® TV adaptor is the perfect interface between the surgical microscope and the KARL STORZ H3-M FULL HD microscope camera head.

The innovative features of QUINTUS® are easy to use, making it one of the most flexible TV adaptors on the market



QUINTUS® stands for 5 main features:

- A rotating C-MOUNT connection at the QUINTUS® TV adaptor allows immediate adaption of the camera orientation during mounting.
- The focus control makes it possible to easily achieve parfocality (perfectly sharp camera and microscope images).
- The iris control provides convenient and optimal adjustment of the depth of field.
- Pan (X) function enables adjustment of the horizontal position of the camera image.
- Tilt (Y) function enables adjustment of the vertical position of the camera image. The pan and tilt functions helps the surgeon to adjust the position of the camera image according to his individual needs.

Focal length of the QUINTUS® TV adaptor:

The QUINTUS® TV adaptor for H3-M COVIEW® HD microscope camera head is available in 2 focal lengths (45 and 55 mm). This provides an optimal FULL HD image in 16:9.



Fig. 1: Camera image detail with a focal length of 45 mm



Fig. 2: Camera image detail with a focal length of 55 mm

2-11





QUINTUS® TV Adaptor



20 9230 45/20 9230 55

20 9230 45 **QUINTUS® Z 45 TV Adaptor,** for CARL ZEISS MEDITEC operating microscopes, f = 45 mm, recommended for

IMAGE1 HD H3-M/H3-M COVIEW® camera heads

20 9230 55 QUINTUS® Z 55 TV Adaptor, for CARL ZEISS MEDITEC

operating microscopes, f = 55 mm, 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

Optical Beamsplitter 50/50, for use with ZEISS operating microscope or colposcope

297

Note: Optical beamsplitters for other operating microscopes (i.e. LEICA or Moeller Wedel) are available directly from the manufacturers.

KARL STORZ FULL HD Monitors

Sophisticated Design in Excellent Quality

The new KARL STORZ monitor series offers the user superior quality combined with outstanding product characteristics that are optimally matched to FULL HD applications in endoscopy. The high-quality aluminium housing in the exclusive KARL STORZ design has been given a silicium dioxide nanocoating finish. The closed housing enables easy cleaning of the monitor through wipe disinfection and thus guarantees optimal hygiene.

The latest electronic technology provides a Picture-in-Picture function, 90° image rotation as well as horizontal and vertical mirror imaging. Input signals are captured directly and immediately transmitted to the display, saving time in the OR. DVI inputs and outputs guarantee flawless endoscopic FULL HD images with a resolution of 1920 x 1080 pixels in 16:9 format. The progressive scan technology of the KARL STORZ FULL HD system provides imaging with minimal latency, even when there is rapid movement.

The innovative LED backlight technology reduces power consumption and expands the service life of the monitors. Easy and intuitive handling via a ring slider provides immediate feedback on the display. The inbuilt RS 232 interface permits remote control of the monitor, enabling integration of the monitor in the KARL STORZ OR1™ system.

Special Features:

- 1920 x 1080 pixels, 50/60 Hz in progressive mode, 16:9 format
- High-quality, fully enclosed housing with nanocoating finish for optimal cleaning and disinfection requirements
- Excellent hygiene characteristics with minimum thermal radiation
- Intuitive use without function keys via ring slider behind closed glass front
- Optional fiber connector available
- Easy integration into KARL STORZ OR1™ system
- High level of flexibility due to diverse connection possibilities
- Low voltage protection via external 24VDC mains power supply

- VESA 100 adaptor for flexible installation options
- Fast response time for imaging with minimal latency
- Premium model with dual video inputs available
- Natural color rendition due to optimal integration into the KARL STORZ FULL HD video chain
- 26" monitor with LED backlight for low energy consumption and longer service life for the monitors
- Picture-in-Picture (PiP) and Picture-by-Picture (PbP) display
- Special settings for mirror imaging and image rotation
- Medical grade FDA, UL and CE approval







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
Fibre Optic	optional	optional	optional
RGBS/VGA	1x	1x	2x
S-Video	1x	1x	2x
Composite	1x	1x	2x
Outputs:			
DVI-D	•	•	•
S-Video	•	•	•
Composite	•	•	•
Signal Format Display:			
4:3	•	•	•
5:4	•	•	•
16:9	•	•	•
Picture-in-Picture	•	•	•
PAL/NTSC compatible	•	•	•

The following accessories are included:

Mains Cord

External 24VDC Power Supply

Signal Cable: DVI-D, VGA, S-Video, BNC

Optional Accessories:

9626 SF **Pedestal,** for 96xx monitor series

Specifications:

KARL STORZ FULL HD Monitor	19"	26"
Desktop with pedestal	optional	optional
Wall-mounted with VESA 100-adaption	9619 NB	9626 NB/NB-2
Brightness	280 cd/m ²	400 cd/m ²
Max. viewing angle	178° vertical	178° vertical
Pixel distance	0.29 mm	0.30 mm
Reaction time	12 ms	12 ms
Contrast ratio	700:1	700:1
Mounting	100 mm VESA	100 mm VESA
Weight	10 kg	14 kg
Rated power	120 W	120 W
Operating conditions	0-40°C	0-40°C
Storage	-20-60°C	-20-60°C
Rel. humidity	max. 80%	max. 80%
Dimensions (w x h x d)	469.5 x 416 x 75.5 mm	699 x 645.6 x 87.5 mm
Power supply	85-264 VAC	85-264 VAC

Larger KARL STORZ FULL HD Monitors see catalog KARL STORZ OR1 NEO™ **Video Connecting Cables** see catalog TELEPRESENCE

System Components

KARL STORZ WIDEVIEW™ HD Monitors

Special Features:

- FULL HD display in 16:9 HD format, max. resolution of 1920 x 1200 pixels
- 1080p/50 and 1080p/60 displays possible, PAL/NTSC compatible
- Anti-reflection coated front glass
- Compact and lightweight design
- Easy-to-reach control buttons on the housing front
- Dripwater protected, dustproof housing
- Low voltage protection via external 24VDC mains power supply
- VESA 100 adaptor for flexible installation options
- Fast response time for virtually lag-free imaging

- Optional fiber optic input for OR1[™] integration
- Picture-Perfect technology for true-to-life image reproduction that incorporates deinterlacing algorithms
- Picture-in-Picture display (PiP)
- Up to 5 different user profiles can be stored
- Meets the medical requirements for FDA, UL and CE approval
- 26" monitor with LED backlight for low energy consumption and longer service life for the monitors









9524 N/NO 9526 N/NO



9524 NB/NBO 9526 NB/NBO

KARL STORZ HD Flat Screens	2	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	•	•	•	•
Fibre Optic	-	•	-	•
VGA	•	•	•	•
Outputs:				
SDI	•	•	•	•
HD-SDI	•	•	•	•
RGBS	•	•	•	•
S-Video	•	•	•	•
Composite	•	•	•	•
DVI-D	•	•	•	•
Signal Format Display:				
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)

12-11

The systems can be operated with KARL STORZ-SCB units.

System Components



KARL STORZ WIDEVIEW™ HD Monitors



Specifications:

KARL STORZ HD Flat Screens	24"	26"
Desktop with pedestal	9524 N/NO	9526 N/NO
Wall-mounted with VESA 100-adaption	9524 NB/NBO	9526 NB/NBO
Brightness	400 cd/m ²	500 cd/m ²
Max. viewing angle	178° vertical	178° vertical
Pixel distance	0.270 mm	0.287 mm
Reaction time	5-12 ms	5-12 ms
Contrast ratio	1000:1	800:1
Mounting	100 mm VESA	100 mm VESA
Weight	7.3 kg	8.2 kg
Rated power	115 Watt	115 Watt
Operating conditions	0-40 °C	0-40 °C
Storage	-20-60 °C	-20-60 °C
Rel. humidity	20-85%, non-condensing	20-85%, non-condensing
Dimensions (w x h x d)	597 x 401 x 100 mm	627 x 427 x 100 mm
Power supply	100-240 VAC	100-240 VAC
Certified to:	EN 60601-1, protection class IPX 1	EN 60601-1, protection class IPX 1





Accessories for HD Monitor - TROLL-E Monitor Cart



20 0200 81

TROLL-E Mobile Stand, rides on 4 antistatic dual wheels, 2 equipped with locking brakes, for mounting TFT monitors with VESA 75/100 connection, integrated cable conduit in vertical beam, 1 shelf and cable manager, load capacity for monitor: max. 15 kg, Dimensions:

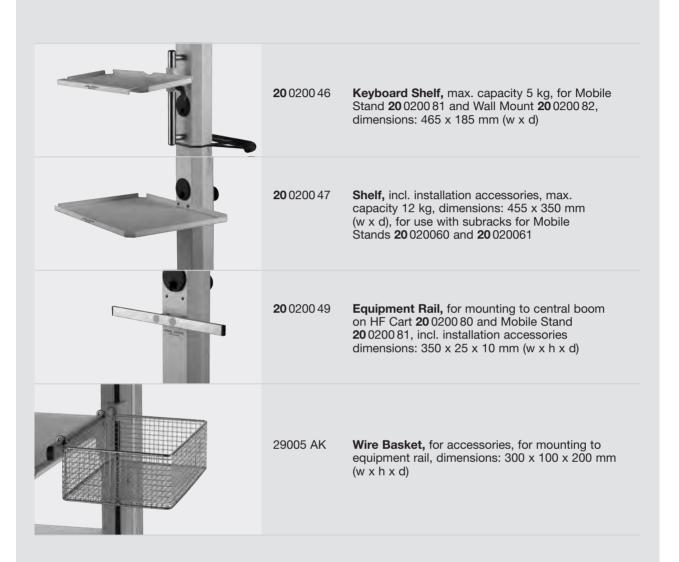
Mobile stand: $670 \times 1660 \times 670 \text{ mm}$ (w x h x d), Shelf: $455 \times 350 \text{ mm}$ (w x d), caster diameter: 100 mm Trolley is delivered unassembled.

Note: This monitor cart is suitable for monitors max. 26".





Accessories for TROLL-E Monitor Cart



System Components



ZeroWire Wireless FULL HD Video Transmission System



The new ZeroWire video transmission system from KARL STORZ enables the wireless integration of secondary monitors into the camera system.

Developed specifically for use in the OR area, ZeroWire replaces the DVI cable between the Camera Control Unit (CCU) and the monitor. The unit simplifies the installation of additional monitors in the OR. ZeroWire optimizes the clinic workflow and reduces preparation time in the operating rooms. ZeroWire offers the user the best FULL HD quality for wireless connections available on the market.

KARL STORZ ZeroWire comprises a transmitter and receiver that transmit FULL HD video signals from IMAGE1 HD CCU to a secondary monitor. Costly and sensitive light fibers or DVI cables are no longer required. ZeroWire delivers 1080p FULL HD imagery with minimal latency which is ensured by the H.264 compression method. This also provides razor-sharp image quality that can barely be distinguished from a conventional DVI connection.

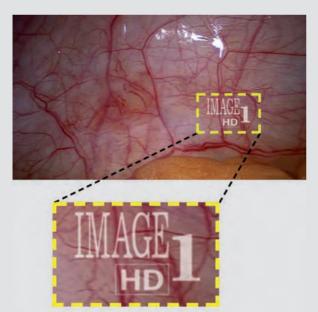
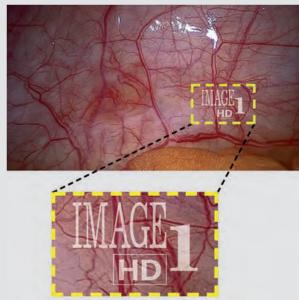


Image quality of a competitor



Very high image quality with ZeroWire

Comparison of the image quality of a competitor with ZeroWire from KARL STORZ. ZeroWire image quality of a transmitted video can barely be distinguished from a DVI connection.

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System Components







9500 TXG/RXG



9500 ZW-6



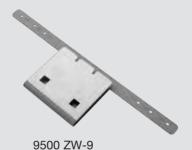
9500 ZW-7/ZW-8



9500 ZW-2



9500 ZW-4



9500 ZW ZeroWire Video Transmission Set,

transmitter and receiver

including:

2x Radiance Y-Cable 19"/26" 2x VESA Holder 24"/26" 2x VESA Holder 19"/23"

2x 2ft DVI-D Cable, for CCU-Tx and

Monitor-Rx connection Instruction Manual

9500 ZW-1 **ZeroWire 42"/52"/55"**, accessory for video

transmission set, with 2ft DVI-D cable, power supply and VESA holder 42"/52"/55"

Components/Spare Parts see catalog MICROSCOPY

System Components



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.

System Components



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 input - S-Video (Y/C)	Audio formats	- WAV	
	Composite RGB (only standard) SD-SDI (only standard) HD-SDI (only standard) DVI-D (only advanced)	Storage media	- DVD+R - DVD+RW - DVD-R - DVD-RW - CD-R
Image formats	- JPG - BMP		- 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 MICROSCOPY

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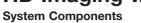


Accessories for KARL STORZ AIDA® compact NEO advanced/standard

Accessories for KARL STORZ AIDA® compact NEO advanced/standard						
	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				
1	29005 SZ	Monitor Swivel Arm, height and side adjustable, can be mounted on the left or on the right side, swivel range 180°, reach 600 mm, for side boom as of 800 mm, loading capacity max. 14 kg, with monitor holder VESA 75/100, for Equipment Cart 29005 LAP/GU/BAS/DRB				
	20 0402 73	Bar Code Scanner				
	9370 TQ	Color Ink Jet Printer, with horizontal paper feed, incl. mains cord, USB printer cable, length 200 cm, black and color ink jet cartridges				
	9370 TP	Photo Ink Jet Printer Paper, for use with Printer 9370 TE/TH/TI/TRN/TQ				
	9371 LA	Color Laser Printer, including mains cord, USB printer cable, length 200 cm				
	20 0902 34U	PS/2 Compact Keyboard, US version, with cover				
	20 0402 32	PS/2 Silicone Keyboard, German version, washable, disinfectable				
4	20 0104 30	Two-Pedal Footswitch, two-stage				

Components/Spare Parts see catalog MICROSCOPY

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Accessories for KARL STO	ORZ AIDA® cor	mpact NEO advanced/standard
	20 0402 72	SVGA Connecting Cable, length 600 cm
	20 0400 73	RS 232 Connecting Cable, length 600 cm
	20 0400 74	Printer Cable, length 300 cm
	20 0401 74	Printer Cable, length 500 cm
	20 0103 70	Potential Equalization Cable, length 200 cm
	20 0102 70	Potential Equalization Cable, length 500 cm
	W20475	OR1™ Network Isolator, for galvanic decoupling of units with RJ45 network connection (100 Mbit)
	20 0900 34	Ethernet Network Board, 10/100 Mbit/s
	20 0900 37	Fiber Optic Network Board, 100 Base-FX (SC)
	20 0901 71	Fiber Optic Network Cable, LWL-patch cable with ST and SC plugs, configured, length 100 cm
	20 0900 36	Media Converter, converts a ST-Port 100 Base-FX to a RJ45 100 Base-TX, including power supply
	20 0400 76	RJ45 Network Cable, length 500 cm
	20 2040 80	CD-R, 700 MB, package of 10
	20 2040 81	DVD+RW, 4.7 GB, package of 5
	20 2040 82	DVD+R, 4.7 GB, package of 10
	20 2040 83	DVD-R, 4.7 GB, package of 10

System Components



Accessories - Equipment Cart



29005 DRB Equipment Cart

including:

basic equipment cart, rides on 4 antistatic dual wheels, 2 equipped with locking brakes (rear), 3 fixed shelves, 1 with push handles, mains switch in side boom, 1 drawer unit with lock, integrated cable conduits in both vertical beams, 1 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 winding on the outside, 1 camera holder, 2 equipment rails sidewise

Dimensions:

Equipment Cart: 730 x 1490 x 716 mm (w x h x d),

Shelf: 630 x 480 mm (w x d), Caster diameter: 150 mm

Accessories:

29005 MHB Monitor Arm, height adjustable, swiveling and

tilting, central mount, swivel range approx. 210°, loading capacity max. 18 kg, with monitor holder VESA 75/100, for use with Equipment Cart

29005 BAS/DRB and 29003 LCG

29005 MZD Monitor Holding Arm, height and side

adjustable, swiveling and tilting, central mount, swivel range 360°, reach 300 mm, loading capacity max. 15 kg, with monitor holder VESA 75/100, with integrated cable conduit,

for use with Equipment Cart 29005 DRB

29005 TBG **Isolation Transformer,** 230 VAC, 2000 VA, with 8 special mains socket expulsion fuses,

8 grounding plugs, for Equipment Carts

29005 BAS/DRB/LAP/GU

29003 IW Earth Leakage Monitor, for use with

Isolation Transformer 29003 TBK and 29005 TBG

29005 KKM Mains Cord, length 100 cm, with cold

device plug and socket, with UL approval

UNITS AND ACCESSORIES



SUCTION AND IRRIGATION SYSTEMS

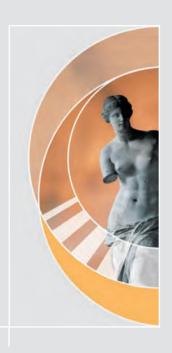
MOTOR SYSTEMS

HIGH FREQUENCY ELECTROSURGICAL UNITS

U 3

Units and Accessories for Plastic Surgery





- SUCTION AND IRRIGATION SYSTEMS
- MOTOR SYSTEMS
- HIGH FREQUENCY ELECTROSURGICAL UNITS

The units manufactured by KARL STORZ combine long-lasting precision mechanics with state-of-the-art micro-electronic 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
- High Frequency Electrosurgical Units

3-03%

AE-S-UNITS-INTRO

Suction and Irrigation Systems





SUCTION AND IRRIGATION SYSTEMS

ENDOMAT® LC SCB DUOMAT®

ENDOMAT® LC SCB

Roller Pump – Irrigation System, Recommended System Configuration



Special Features:

- Simple roller pump system, flow-regulated, for suction. To improve visibility during suction, the second level of Footswitch 20 0142 30 can be used to activate a flow between 500 and 1000 ml/min.
- SCB model with connections to the KARL STORZ Communication Bus (KARL STORZ-SCB)



20 3303 01-1 ENDOMAT® LC SCB,

power supply 100 - 240 VAC, 50/60 Hz

including:

Mains Cord

Silicone Tubing Set, for irrigation, sterilizable Silicone Tubing Set, for suction, sterilizable SCB Connecting Cable, length 100 cm

Recommended Optional Accessories:

20 0142 30 **One-Pedal Footswitch,** digital, two-stage, for activating a higher flow for improved visibility

031119-10* **Tubing Set,** for irrigation, sterile, for single use, with two puncture cannulas, package of 10

Specifications:

Flow Regulated	0-1000 ml/min	Dimensions	305 x 110 x 260 mm	
Pressure	unregulated: max. 1125 mmHg (150 kPa)	w x h x d (mm)		
Suction Pressure	unregulated: -0.46 bar (-46 kPa)	Weight	4.5 kg	
Power Supply	100-240 VAC, 50/60 Hz	Certified to	IEC 601-1, CE acc. to MDD	



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Optional Accessories for the ENDOMAT® LC SCB see pages U 10-11 **Components/Spare Parts** see chapter 14

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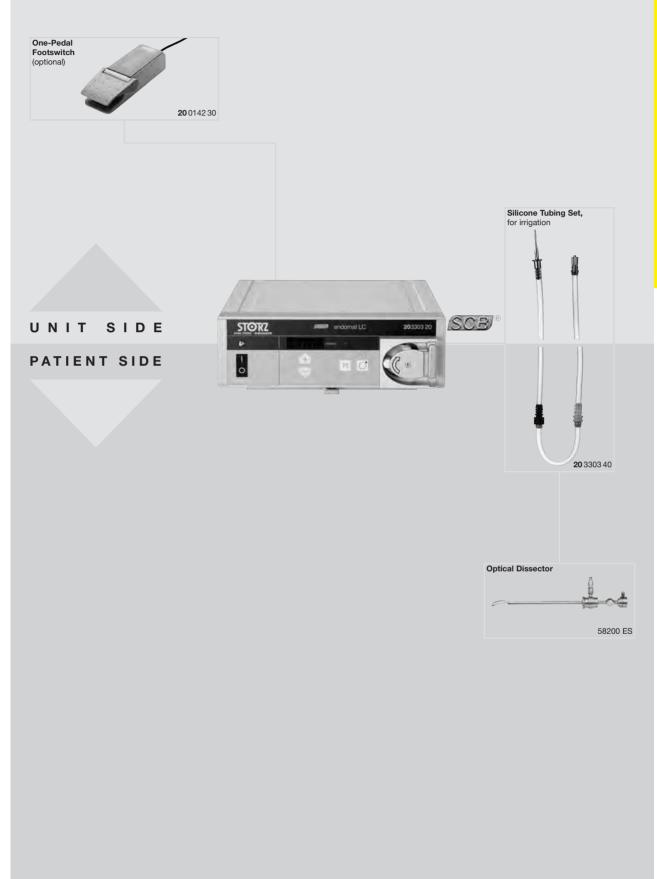
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ENDOMAT® LC SCB





SUCTION AND IRRIGATION SYSTEMS



DUOMAT®

Suction and Irrigation System, Recommended System Configuration



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 |

Specifications:

Flow Regulated	max. 400 mmHg (53.2 kPa)	Dimensions	305 x 110 x 260 mm	
Suction Pressure	unregulated: max. (-)0.75 bar (-75 kPa)	w x h x d (mm) Weight		
Power Supply	100-120, 230-240 VAC, 50/60 Hz	Certified to	IEC 601-1, CE acc. to MDD	



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Optional Accessories for DUOMAT® see pages U 10-11 **Components/Spare Parts** see chapter 14

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U 8

DUOMAT®

System Components





Optional Accessories for Suction and Irrigation Systems



				r use with
			ENDOMAT® LC SCB	DUOMAT ® 20 321008
	26 3100 38	Pressure Infusion Cuff, 1.5	-	•
	26 3101 38	Pressure Infusion Cuff, 3	-	•
	26 3100 35	Bottle Cap, sterilizable, for use with irrigation bottles 1 I and 1.5 I, sterile (cylindrical and square) type Abbott and Baxter Laboratories	-	•
	26 3102 35	Bottle Cap, sterilizable, for use with irrigation bottle 1 I, sterile (round), type Fresenius and B. Braun (old type), Delta Pharma (round)	-	•
•	26 3103 35	Bottle Cap, sterilizable, for use with irrigation bottle 1 I, sterile (round or square), type B. Braun (old type) and Delta Pharma	-	•
To the second se	20 3000 52 20 3000 34 20 3001 30	Suction Bottle, 1.5 I, sterilizable Bottle Cap, for suction bottles 1.5 I and 5 I, sterilizable Bottle Stand, for suction bottle 1.5 I or irrigation bottle 1 I	-	•
	26 3100 50	Irrigation Liquid Bottle, 1 I, sterilizable	-	•
	26 3100 35	Bottle Cap, sterilizable	-	•
<i></i>	20 3000 50	Suction Bottle, 5 I, sterilizable	-	•
	20 3000 34	Bottle Cap, for suction bottles 1.5 I and 5 I, sterilizable	-	•
100	20 3000 32	Bottle Stand, for suction bottle 5 I	-	•
	20 3000 33	Bottle Stand Holder, for Bottle Stand 20 3000 32	-	•

SUCTION AND IRRIGATION SYSTEMS

Optional Accessories

for Suction and Irrigation Systems



				r use with
			ENDOMAT® LC SCB	BUOMAT ® 20 321000
	20 0142 30	One-Pedal Footswitch, digital, two-stage, for activating a higher flow for improved visibility	•	-
	20 0141 30	One-Pedal Footswitch, one-stage, for freeze frame or video recording in combination with IMAGE 1 HUB™ 22 2010 20-110/-112 and 22 2000 20-112	•	-
	20 3000 42	Silicone Tubing Set, for suction, sterilizable	-	•
()	20 3000 44	Silicone Tubing Set, for suction, sterilizable, short	-	•
1)	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	-	•
	031124-10*	Filter, to block fluid during suction, for single use, unsterile, package of 10	-	•
	mtp*	Receptacle, reusable, 2 l	-	•
	mtp*	Suction Bag, with filter, for single use	-	•
* mtp	mtp*	Tubing Set, for suction, sterile, for single use	-	•
	030147-10*	Tubing Set, for single use, for suction, sterile, package of 10, consisting of patient tube and pump tube, for use with KARL STORZ suction and suction/irrigation pumps and Bottle Cap 20 3000 34	-	•

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AE-S-UNITS 9 A





MOTOR SYSTEMS

NEW UNIDRIVE® SIII ENT SCB

NEW UNIDRIVE® SIII ECO

Special Features



UNIDRIVE® SIII ENT SCB/UNIDRIVE® SIII ECO

The multifunctional unit for ENT





UNIDRIVE® S III ENT SCB

UNIDRIVE® S III ECO

Special features:	UNIDRIVE® SIII	UNIDRIVE® SIII
Touch Screen: Straightforward function selection via touch screen	•	-
The unit stores the parameter values of the functions selected during the last operation session	•	•
Optimized user control due to Touch Screen	•	-
Choice of user languages	•	-
Operating elements are single and clear to read due to color display	•	-
One unit – six functions: - Shaver system for surgery of the paranasal sinuses and anterior skull base - INTRA Drills - Sinus Shavers - Micro Saws - STAMMBERGER-SACHSE Intranasal Drill - Dermatomes	•	•
Two outputs: Two motor outputs enable to connect two motors simultaneously: For example, an intranasal drill and a paranasal sinus shaver or 2 INTRA drill handpieces may be connected in parallel.	•	•
Integrated irrigation and coolant pump: Absolutely homogeneous, micro-processor controlled irrigation rate throughout the entire irrigation range. Quick and easy connection of the tubing set.	•	•
Easy program selection via automated motor recognition	•	•
Continuously variable revolution range	•	•
Maximum number of revolutions and motor torque: Microprocessor-controlled revolutions per minute. Therefore the preselected parameters are maintained all the time during drilling.	•	•
Maximum number of evolutions can be preset	•	•
SCB model with connections to the KARL STORZ Communication Bus (KARL STORZ-SCB)	•	-
Irrigator rod included	•	-

7-071

AE-S-UNITS 13 C U 15

Specifications



Common technical specifications of both systems

Mode		Handpiece No.	rpm
Shaver mode Operation mode: Max. rev. (rpm):	oscillating in conjunction with Handpiece: DrillCut-X® II Shaver Handpiece DrillCut-X® II N Shaver Handpiece DrillCut-X® Shaver Handpiece	40 7120 50 40 7120 55 40 7110 50	10,000* 10,000* 7,000*
Sinus burr mode Operation mode: Max. rev. (rpm):	rotating in conjunction with Handpiece: DrillCut-X® II Shaver Handpiece DrillCut-X® II N Shaver Handpiece DrillCut-X® Shaver Handpiece	40 7120 50 40 7120 55 40 7110 50	12,000 12,000 12,000
Drilling mode Operation mode: Max. rev. (rpm):	counterclockwise or clockwise in conjunction with: micro motor and connecting cable	20 7110 32 20 7111 72	40,000
Micro saw mode Max. rev. (rpm):	in conjunction with: micro motor and connecting cable	20 7110 32 20 7111 72	20,000 15,000
Intranasal drill mode Max. rev. (rpm):	in conjunction with: micro motor and connecting cable	20 7110 32 20 7111 72	60,000
Dermatome mode Max. rev. (rpm):	in conjunction with: micro motor and connecting cable	20 711032 20 711172	8,000
Power supply:	100 – 240 VAC, 50/60 Hz		
Dimensions: (w x h x d)	300 x 165 x 265 mm		

Two outputs for parallel connection of two motors

Integrated irrigation pump:

Flow: adjustable in 9 steps

^{*} Approx. 4,000 rpm is recommended as this is the most efficient suction/performance ratio

Specifications



Technical differences between both systems

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

Special features of the EC micro motor with INTRA coupling:



20 7110 32/**20** 7111 72

- Self-cooling, brushless high performance EC micro motor
- Smallest possible dimensions
- Autoclavable
- Can be processed in a cleaning machine
- Removable connection cable
- INTRA coupling enables a wide variety of applications
- Maximum torque 4 Ncm
- Number of revolutions can be continuously adjusted from 0 40,000 rpm

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

Recommended System Configuration



UNIDRIVE® S III ENT SCB

UNIDRIVE® S III ECO





40 7016 20-1

40 7014 20

40 7016 01-1 UNIDRIVE® S III ENT SCB, motor control unit with color display,

touch screen, two motor outputs, integrated irrigation pump and SCB module, power supply 100 – 240 VAC, 50/60 Hz

including:

Mains Cord

Irrigator Rod

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

Silicone Tubing Set, for irrigation, sterilizable

Clip Set, for use with silicone tubing set

SCB Connecting Cable, length 100 cm

Single Use Tubing Set*, sterile, package of 3

40 7014 01 **UNIDRIVE® S III ECO,** motor control unit with two motor outputs and integrated irrigation pump, power supply 100 – 240 VAC, 50/60 Hz

including:

Mains Cord

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

Silicone Tubing Set, for irrigation, sterilizable

Clip Set, for use with silicone tubing set

Specifications:

Touch Screen	UNIDRIVE® S III ENT SCB: 6.4"/300 cd/m²	Dimensions w x h x d	300 x 165 x 265 mm
Flow	9 steps	Weight	5.2 kg
Power supply	100-240 VAC, 50/60 Hz	Certified to	IEC 601-1, CE acc. to MDD



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Components/Spare Parts see chapter 14

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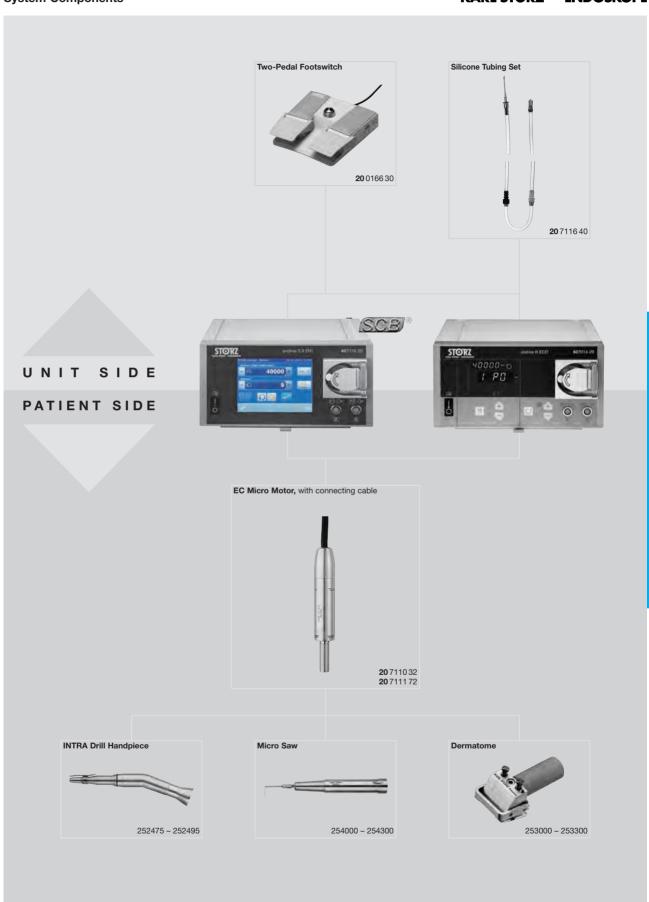
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MOTOR SYSTEMS

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

STORY ENDOSKOPE

System Components



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



	20 711032	High Performance EC Micro Motor
	20 7111 72	Connecting Cable, for connecting EC Motor 20 7110 32 to control unit
1	280052	Universal Spray, for fast, smooth and thorough cleaning and lubrication, for INTRA drill handpieces and EC motors, package of 6 sprayers and 1 Spray Diffuser 280052 C – HAZARDOUS GOODS – UN 1950
	280052 C	Spray Diffuser, for use with Universal Spray 280052
* mto	031131-10*	Tubing Set, for irrigation, for single use, sterile, package of 10

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U 20 AE-S-UNITS 18 C

High Frequency Electrosurgical Units





HIGH FREQUENCY ELECTROSURGICAL UNITS

NEW AUTOCON® II 400 SCB

NEW AUTOCON® II 200

NEW AUTOCON® II 80

HIGH FREQUENCY ELECTROSURGICAL UNITS

AUTOCON® II 400 SCB



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 handswitch 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.











AUTOCON® II 400 SCB

Safety Aspects and Main Features



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 highend 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

Safety Aspects and Main Features

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-todate.











HIGH FREQUENCY ELECTROSURGICAL UNITS

HIGH FREQUENCY ELECTROSURGICAL UNITS

AUTOCON® II 400 SCB, NEW AUTOCON® II 200/80



Special Features

Special Features:	AUTOCON® II 400	AUTOCON® II 200	AUTOCON® "
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	•	•	-
Separate papillo-cut and gastro-cut functions enable fractionated cutting with regulated HF current at different cutting speeds for flexible endoscopy	•	•	-
Autostart function for bipolar coagulation: Automatic activation of coagulation current as soon as coagulation electrode touches tissue with both branches	•	•	-
Activation of HF functions possible via footswitch or manual control switch for unipolar or bipolar	•	•	-
Bipolar resection with KARL STORZ bipolar electrotomes	•	-	_
Bipolar application with NaCl irrigation solution	•	-	-
Modular connecting sockets for unipolar and bipolar applications can be selected according to individual requirements	•	•	•
100 applications with text can be stored	•	-	-
Convenient use via 6.5" Touch Screen	•	-	-
Switchover function enables switching between two modes within a user program via a footswitch from the sterile area	•	-	-
Arc-controlled cutting, unipolar	•	-	-
Compatible with KARL STORZ Communication Bus (KARL STORZ-SCB)	•	-	-
Service port for software updates and HF functionality upgrades			

AUTOCON® II 400 SCB





HF Modes	Effects	P max. at 500 Ohm	V _P max. at 500 Ohm	Crest Factor	Arc Control	Voltag Contro
Jnipolar						
TOP-Cut	8	300	950	1.4	•	_
POWER-Cut	8	300	740	1.4	-	•
C-Cut®	8	200	1450	3.0	-	•
LAP-C-Cut	8	200	1450	3.0 – 3.8	-	•
Gastro-Cut	4	200	880	1.4	-	•
Papillo-Cut	4	200	880	1.4	-	•
Standard Coag	8	200 (at 50 Ohm)	190	1.4	-	•
Forced Coag	4	120	1800	6.0	-	•
Spray Coag	2	120	4300	7.4	-	•
Bipolar						
Bipolar-Cut	8	100	740	1.4	-	•
Saline-C-Cut	8	370	770	1.4	-	•
Saline-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.	,	190	1.4	-	•
Saline-Time-Coag ++*	8 time 0.1-1 sec.	,	190	1.4	-	•
Bipolar Soft Coag	8	120 (at 75 Ohm)	190	1.4	-	•
Bipolar Soft with Auto-Stop	8	120 (at 75 Ohm)	190	1.4	-	•
Bi-Vascular-Safe**	8	300 (at 25 Ohm)	220	1.4	-	•

Specifications:

- Automatic self-test - Maldosage Safety systems

- Neutral electrode safety system
(dynamic, two-part, one- and two-part NE)
- LF/HF leakage current monitor
- Activation time
- Deactivable HF

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

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AUTOCON® II 400 SCB,

power supply 220 – 240 VAC, 50/60 Hz including:

Mains Cord

SCB Connecting Cable, length 100 cm

AUTOCON® II 400 SCB,

power supply 100 – 120 VAC, 50/60 Hz including:

Mains Cord

SCB Connecting Cable, length 100 cm

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

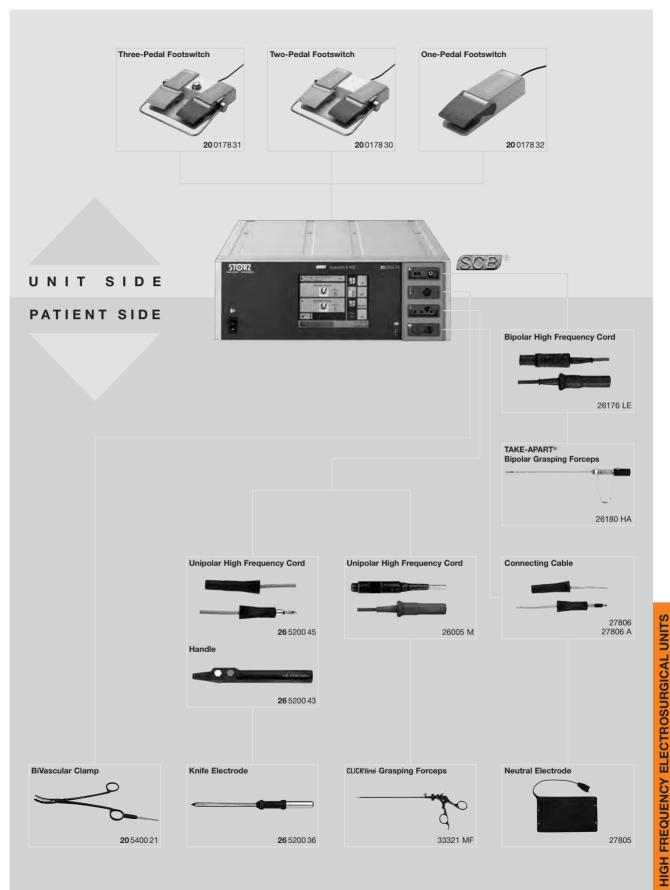
Optional Accessories for AUTOCON®II 400 SCB see pages U 34-U 38 **Components/Spare Parts** see chapter 14

HIGH FREQUENCY ELECTROSURGICAL UNITS

AUTOCON® II 400 SCB







High Frequency Electrosurgical Unit, Recommended System 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

 $\mathbf{20}\,5322\,01\text{C}010\,\mathbf{AUTOCON^{@}\,II}\,\,\mathbf{200},$ with GASTRO-Cut,

power supply 100 -120 VAC, 50/60 Hz

including:

Mains Cord, US version

Specifications:

HF rated power	- 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/50 Ohm Standard-Coag (bipolar): 120 Watt/75 Ohm
Max. voltage	- Cutting Power-Cut (unipolar): 740Vp GASTRO-Cut (unipolar): 550Vp - Coagulation Standard-Coag (unipolar): 190Vp Forced-Coag (unipolar): 1800Vp Standard-Coag (bipolar): 190Vp
Degree of coagulation	Power-Cut: 8 GASTRO-Cut: 4 Standard-Coag: 8 Forced-Coag: 4 Bipolar Standard-Coag: 8

Autostart	Coagulation bipolar
Autostop	Coagulation unipolar standard
Safety systems	 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 34-U 38

Components/Spare Parts see chapter 14

AUTOCON® II 200







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HIGH FREQUENCY ELECTROSURGICAL UNITS

High Frequency Electrosurgical Unit, Recommended Set Configurations





20 5308 01 AUTOCON® II 80,

power supply 100 - 240 VAC, 50/60 Hz

including:

Mains Cord

ecifications:

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

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

Optional Accessories for AUTOCON® II 80 see pages U 34-U 38

Components/Spare Parts see chapter 14

HIGH FREQUENCY ELECTROSURGICAL UNITS

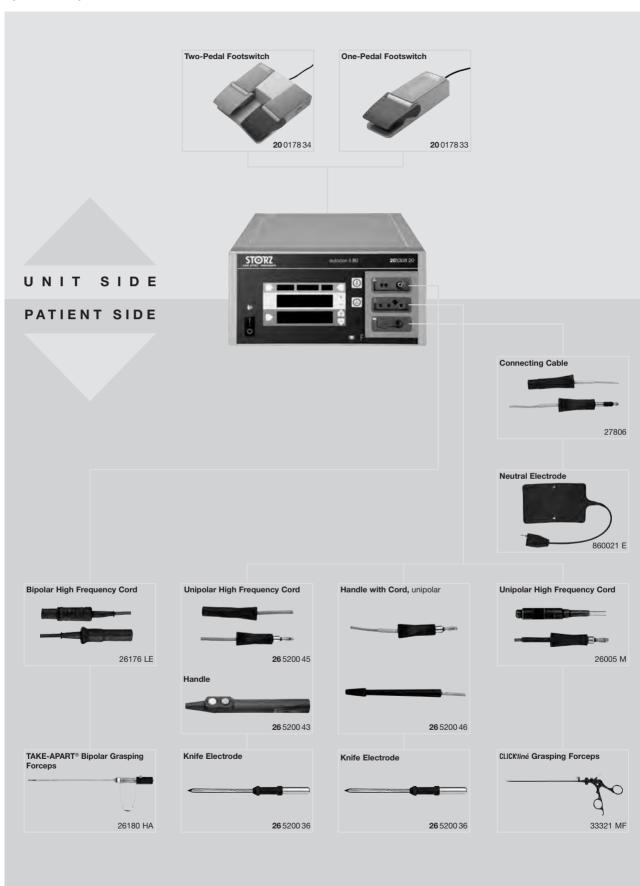
AUTOCON® II 80

System Components



HIGH FREQUENCY ELECTROSURGICAL UNITS

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HIGH FREQUENCY ELECTROSURGICAL UNITS

Optional Accessories for AUTOCON® II 400 SCB and AUTOCON® II 200/80



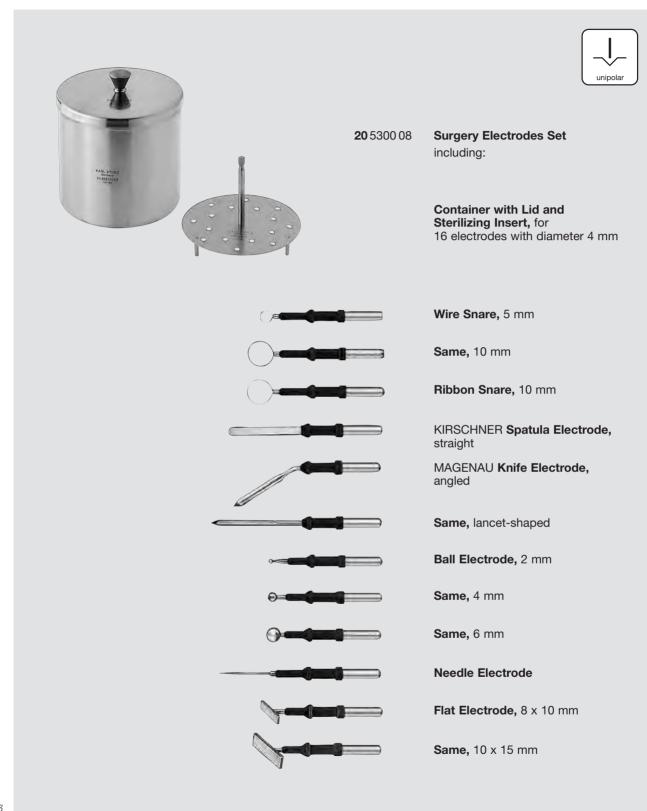
			AUTOCON® II 400		AUTOCON® II 80
	20 017831	Three-Pedal Footswitch, with switch function for switching between mode levels A and B, for use with AUTOCON® II 400 SCB	•	-	-
	20 017830	Two-Pedal Footswitch, for use with AUTOCON® II 400 SCB and AUTOCON® II 200	•	•	-
	20 017832	One-Pedal Footswitch, for activating coagulation, for use with AUTOCON® II 400 SCB and AUTOCON® II 200	•	•	-
1	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	•	•

HIGH FREQUENCY ELECTROSURGICAL UNITS

Surgery Electrodes Set

Accessories





For use with Electrode Handles 26 5200 43 and 26 5200 46 Components/Spare Parts see chapter 14

Accessories

Unipolar High Frequency Cords



AUTOCON® II 400 SCB system (111, 115, 122, 125), AUTOCON® II 200, AUTOCON® II 80, KARL STORZ AUTOCON® system (50, 200, 350) and Erbe

Unipolar High Frequency Cord, with 8 mm plug for models KARL STORZ AUTOCON® II 400 SCB system (112, 116) and Valleylab, length 300 cm

type ICC, length 300 cm

Unipolar High Frequency Cords KARL STORZ Instrument High Frequency Electrosurgical 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 models Berchtold and Martin, length 5 mm plug for models Berchtold Berchto

26006 M

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 $\bf L$ to the part number, e. g. 26002 M $\bf L$, 26176 LV $\bf L$.

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Accessories

Bipolar High Frequency Cords



Bipolar High Frequency Cords bipola KARL STORZ High Frequency Electrosurgical Units Instrument 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



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Compatibility

High Frequency Cords to AUTOCON® HF Electrosurgical 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 Freq	uency Cords				
27806	•	-	•	•	•
27801	•	-	•	•	•
27806 UR	-	•	•	•	•
27806 US	-	•	•	•	•
26 5200 45	•	_	•	•	•
26 5200 46	•	_	•	•	•
26002 M	•	•	•	•	•
26005 M	•	_	•	•	•
26006 M	-	•	-	-	-
Bipolar High Frequ	ency Cords				
26176 LE	•	-	•	•	•
26176 LV	-	•	•	•	•
Bipolar High Frequ	ency Cords to M	ultifunction Socke	t		
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	_	_	_	_	•



Introduction



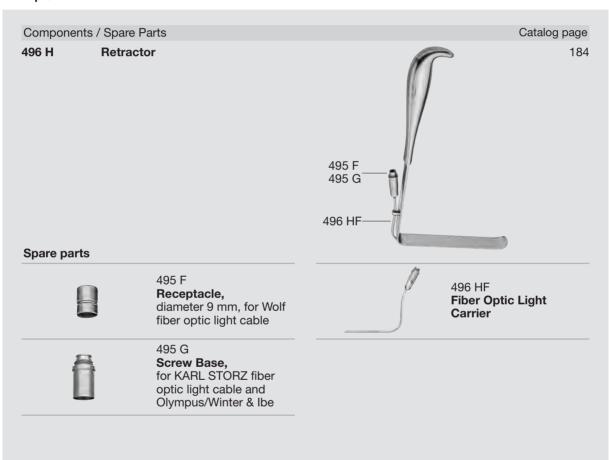
The chapter "Components / Spare Parts" contains detailed information on KARL STORZ instruments.

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:



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

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SP 41

SP 46

HOSPITAL SUPPLIES

ENT Diagnosis Set, HEINE Otoscope

Handles, Coagulation Suction Tubes

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28300 BA	SP 54	403355	SP 31	479800	SP 36
28303 BH	SP 55	403375	SP 31	479800 E	SP 36
28303 CR	SP 55	403390	SP 31	488084	SP 40
28303 DR	SP 56	403441	SP 31, SP 33, SP 59	488084 E	SP 40
28304 E1	SP 57	403540	SP 31	488085	SP 40
28304 EA	SP 57	403555	SP 31	488085 E	SP 40
28304 EB	SP 57	403565	SP 31	488086	SP 40
28305 BA	SP 54	403575	SP 31	488086 E	SP 40
28306 BN	SP 56	403590	SP 31	495 F	SP 22, SP 24, SP 32,
28310 E	SP 58	403835	SP 31		SP 38, SP 43, SP 45,
28310 FH	SP 58	403855	SP 31		SP 47, SP 48, SP 50, SP 51, SP 54, SP 59
28310 Z	SP 58	403865	SP 31	495 G	SP 22, SP 24, SP 32,
28310 ZG	SP 58	403875	SP 31	700 G	SP 38, SP 43, SP 45,
28310 ZH	SP 58	403890	SP 31		SP 47, SP 48, SP 50,
28400 AA	SP 54	404037	SP 32, SP 59		SP 51, SP 54, SP 59

Numerical Index

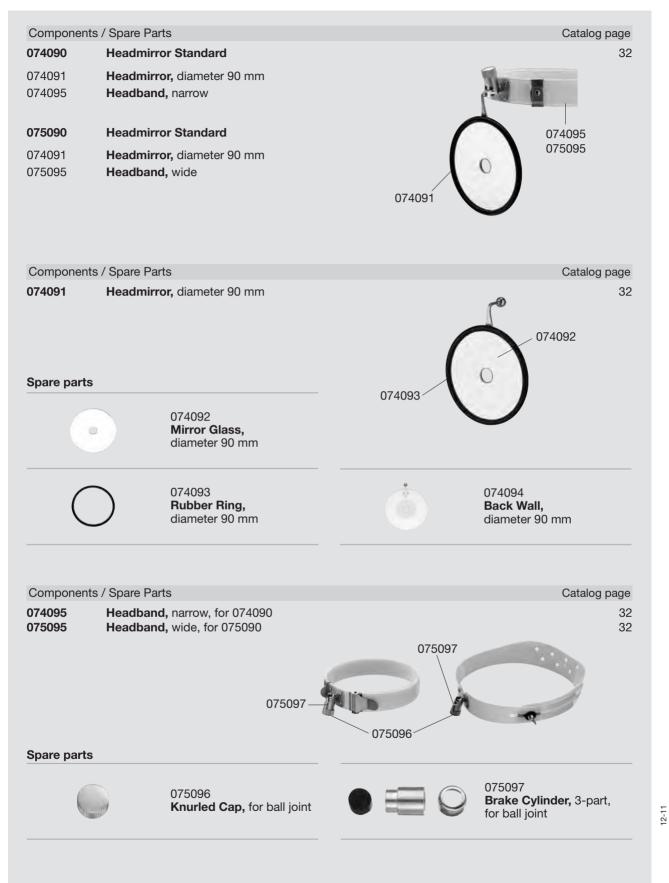
COMPONENTS / SPARE PARTS



Product	Page	Product	Page	Product	Page
495 NAS	SP 6	50251 LSR	SP 44, SP 49	600008	SP 65
495 NWMS	SP 6	50251 M	SP 44	6011590	SP 26, SP 27, SP 53, SP 60
495 NY	SP 18	50251 MH	SP 44	6052191	SP 23, SP 55, SP 58
495 NYW	SP 18	50251 MS	SP 44	6052691	SP 56
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50173 AM	SP 26	50251 RBB	SP 51	6104391	SP 56
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50200 LS	SP 24, SP 49	50510 S	SP 53	6979191	SP 30
50203 BS	SP 27	50521 FP	SP 53	6985691	SP 23, SP 55, SP 56, SP 58
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50209 RT	SP 47	523900	SP 38	748221	SP 61
50209 RTB	SP 47	523901	SP 38	752918	SP 61
50209 RTR	SP 47	523950	SP 38	752923	SP 6 ⁻
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50235 GW	SP 27	529207 E	SP 40	826200	SP 4
50235 T	SP 25	529209	SP 40	826201	SP 4
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50251 LR	SP 44	600007	SP 65	9909890	SP 23

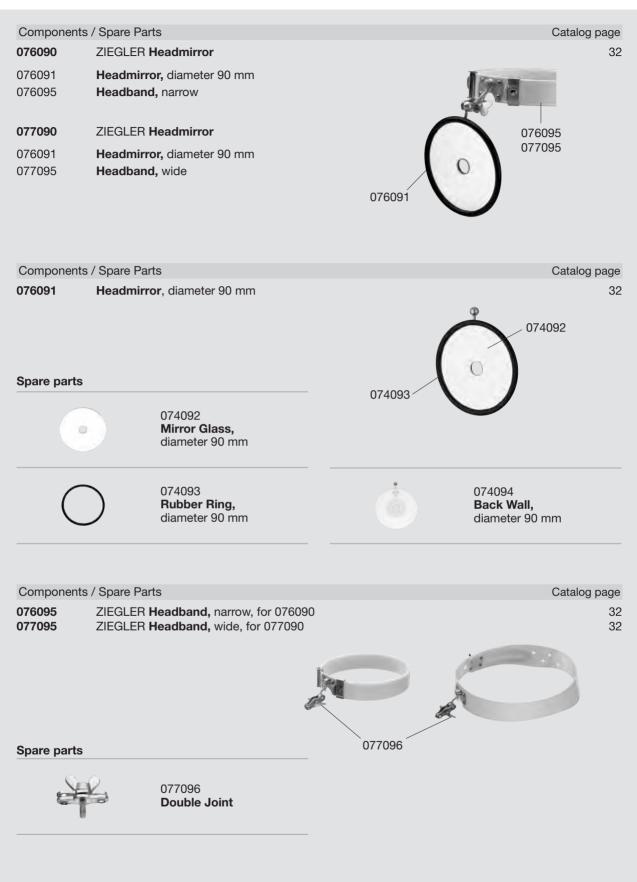
Headmirrors, Headbands





Headmirrors, Headbands





PL-SUR-SP 1





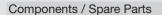
Componen	ts / Spare Parts	Catalog page
094051	Headlight	37
094053	Headlight, with U-shaped suspension and ball joint	078730
078730	Headband, fully adjustable, with Forehead Cushion 078511, with cross band, including ball joint holder for Headlights 094051, 094055, 095501 and 095505	5001 495 NAS
495 NAS	Fiber Optic Light Cable, straight plug, diameter 3.5 mm, length 230 cm	
078681	Clip with Band, for attaching the fiber optic light cable to OR clothing	094053 495 NAS
		078681

094055	Headlight
094053	Headlight, with U-shaped suspension and ball joint
078730	Headband, fully adjustable, with Forehead Cushion 078511, with cross band, including ball joint holder for Headlights 094051, 094055, 095501 and 095505
495 NWMS	Fiber Optic Light Cable, with 90° deflection to the cold light source, diameter 3.5 mm, length 230 cm
078681	Clip with Band, for attaching the fiber optic light cable to OR clothing



078681





Catalog page

078730

Headband, for 094051 and 094055

37



Spare parts



078502 **Screw Cap**



078511 **Forehead Cushion,** with push-button lock







078503 **Brake Cylinder,** 3-part, for ball joint



310073 **Protection Clip,** for cold light cable, for fixing the light cable to the headband, 2 pcs

Catalog page

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Components / Spare Parts

094053

Headlight, for 094051 and 094055



Spare parts



084508 Suspension, with cross connection, for 084500 – 084503



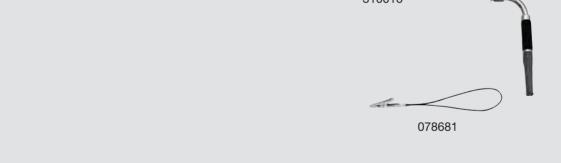
094005 **Handle,** sterilizable, with sleeve



5915702 **Thread Pin,** for lamp head



		KARL SIOKZ	LIADOSKOPI
Components	/ Spare Parts		Catalog page
310010	Headlight, with straight plug		38
310011	Headlight, with thin, 230 cm long integral fiber optic light cable, diameter 2.5 mm, with straight plug to the light source		1
310075	Headband, extra light, fully adjustable, with Forehead Cushion 078511, without cross band, including clamp mounting for Headlight 310010/310015	STE STE	
078681	Clip with Band, for attaching fiber optic light cable to OR clothing	310	0075
	·	310011	
		078681	
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	STO	
078681	Clip with Band, for attaching fiber optic light cable to OR clothing	310	0075
		310016	



Components / Spare Parts Catalog page 38

310075 **Headband,** for 310010 and 310015



Spare parts



078511 Forehead Cushion, with push-button lock





Componen	ts / Spare Parts	Catalog page
310020	Headlight, with straight plug	38
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	Tolk
078681	Clip with Band, for attaching fiber optic light cable to OR clothing	310076
		310011
		078681
310025	Headlight, with 90° deflection	
310016	Headlight, with thin, 230 cm long integral fiber optic light cable, diameter 2.5 mm, with 90° deflection to the light source	
310076	Headband, fully adjustable, with Forehead Cushion 078511, with cross band, including clamp mounting for Headlight 310020/310025	500
078681	Clip with Band, for attaching fiber optic light cable to OR clothing	310076
		310016
		078681

Components / Spare Parts

Catalog page

38

310076 Headband, for 310020 and 310025



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





	its / Spare Parts	Catalog page
094301	•	Catalog page 39-40
094301	Headlight, with straight plug Headlight, with thin, 230 cm long integral fiber optic light cable, diameter 2.5 mm, with straight plug to the light source	39-40
078740	Headband, extra light, fully adjustable, with Forehead Cushion 078511, without cross band, with clamp mounting, for Headlights 094301 – 094330	350
078681	Clip with Band, for attaching fiber optic light cable to OR clothing	094302 078740
		078681
094305	Headlight, with 90° deflection	
094306	Headlight, with thin, 230 cm long integral fiber optic light cable, diameter 2.5 mm, with 90° deflection to the light source	
078740	Headband, extra light, fully adjustable, with Forehead Cushion 078511, without cross band, with clamp mounting, for Headlights 094301 – 094330	094306 078740
078681	Clip with Band, for attaching fiber optic light cable to OR clothing	078681
094320	Headlight, with straight plug	
094322	Headlight, with thin, 230 cm long integral fiber optic light cable, diameter 2.5 mm, with straight plug to the light source	
078740	Headband, extra light, fully adjustable, with Forehead Cushion 078511, without cross band, with clamp mounting, for Headlights 094301 – 094330	094322 078740
078681	Clip with Band, for attaching fiber optic light cable to OR clothing	

12-11

078681





Componen	nts / Spare Parts	Catalog page
094325	Headlight, with 90° deflection	40
094326	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	300
078681	Clip with Band, for attaching fiber optic light cable to OR clothing	094326 078740
		078681

094330	Headlight
094332	Headlight, with connection for use with thin, 230 cm long fiber optic light cable 495 NTAS with straight plug or 495 NTXS with 90° deflection to the light source
078740	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



Component	s / Spare Parts	Catalog page
078740	Headband, for 094301, 094305, 094320, 094325 and 094330	42

Spare parts



078511 Forehead Cushion, with push-button lock



LED Headlights



Component	s / Spare Parts	Catalog page	
094100	LED Headlight, with white light	35	
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	094108 078760	
094110	LED Headlight, with yellowish light	094103	
094104	Headlight, LED technology, yellowish light, including connecting cable for battery box	094104	
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

35

094108 Battery Box, for 094100 and 094110



Spare parts



094108 B **Cover,** for Battery Box 094108



121306 P **Photo Battery,** lithium, 3 V, CR 123 A

Spare parts for Headband see page SP 14

LED Headlights



Componen	ts / Spare Parts	Catalog page
094120	LED Headlight, with white light	35
094103	Headlight, LED technology, white light, including connecting cable for rechargeable battery box	
094124	Rechargeable Battery Box, with 1 Li-lon 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	094124 078760 094103 094104
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-lon 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	

Components / Spare Parts

Catalog page

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O94124 Rechargeable Battery Box, for 094120 and 094130

Rechargeable Battery Box 094124

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



Spare parts

078760



094125 A **Li-Ion Rechargeable Battery Cell,** with key

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 Headband see page SP 14

LED Headlights



Components / Spare Parts

Catalog page

078760 Headband, for 094100, 094110, 094120 and 094130

35



Spare parts



078511 **Forehead Cushion,** with push-button lock



310073 **Protection Clip,** for cold light cable, for fixing the light cable to the headband, 2 pcs



094109 Holding Band, for Battery Box 094108 or Rechargeable Battery Box 094124, leather, with snap closure

Headlights Headlights "CLAR 73"



Componer	nts / Spare Parts	Catalog page
095501	Headlight "CLAR 73", with straight plug	— Catalog page
095502	Headlight "CLAR 73", with 230 cm long integral fiber optic light cable, diameter 3.5 mm, with straight plug to the light source	
078730	Headband, fully adjustable, with Forehead Cushion 078511, with cross band, including ball joint holder, for Headlights 094051, 094055, 095501 and 095505	20087
078681	Clip with Band, for attaching fiber optic light cable to OR clothing	078730
		095502
		078681
095505	Headlight "CLAR 73", with 90° deflection	
095506	Headlight "CLAR 73", with 230 cm long integral fiber optic light cable, diameter 3.5 mm, with 90° deflection to the light source	
078730	Headband, fully adjustable, with Forehead Cushion 078511, with cross band, including ball joint holder, for Headlights 094051, 094055, 095501 and 095505	STON.
078681	Clip with Band, for attaching fiber optic light cable to OR clothing	078730
		095506

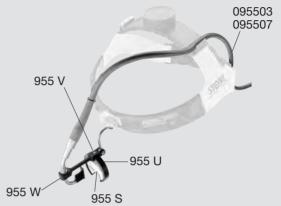
Spare parts for Headlights and Headbands see the following pages

078681

Headlights "CLAR 73"



Components / Spare Parts Catalog page **Headlight "CLAR 73",** with straight plug **Headlight "CLAR 73",** with 90° deflection 095502 095506 41



Spare parts



955 S Mirror



955 U Metal Holder,



for mirror



955 V **Fixation Screw,** for metal holder (mirror)



955 W **Fixation Screw,** for fiber optic light cable



955 Z Fixation Screw, set of 2 Spare parts for 095502



095503 **Integral Fiber Optic Light**

Cable, with straight plug

Spare parts for 095506



095507

Integral Fiber Optic Light Cable, with 90° deflection

Headlights "CLAR 73"



Components / Spare Parts Catalog page 078730 **Headband,** for 095501 and 095505 42 310073 078511 078502 078503 Spare parts 078511 078502 Forehead Cushion, with push-button lock **Screw Cap** 310073 Protection Clip, for cold light cable, for fixing the light cable to the headband, 2 pcs 078503 **Brake Cylinder,** 3-part, for ball joint

Headlights Headlights KS60



310060	Headlight KS60	3
310063	Headlight KS60, with removable and sterilizable Focus Handle 310065	310070
310070	Headband, fully adjustable, with Forehead Cushion 078511, with cross band, including holder for Headlight 310063	
195 NY	Y-Fiber Optic Light Cable, with special protective casing for Headlight 310063, length 290 cm	ANT ANY
078681	Clip with Band, for attaching the fiber optic light cable to OR clothing	495 NY 310063
		495 NY
		070004
		078681
310061	Headlight KS60	310070
310063	Headlight KS60, with removable and sterilizable Focus Handle 310065	310070
310070	Headband, fully adjustable, with Forehead Cushion 078511, with cross band, including holder for Headlight 310063	100
195 NYW	Y-Fiber Optic Light Cable, with special protective casing for Headlight 310063, with 90° deflection to the cold light source, length 290 cm	495 NYW 310063
078681	Clip with Band, for attaching the fiber optic light cable to OR clothing	
		495 NYW

078681

Headlights KS60



Components / Spare Parts

310070 Headband, for 310060 and 310061



Spare parts



078511 Forehead Cushion, with push-button lock



310073 Protection Clip, for cold light cable, for fixing the light cable to the headband, 2 pcs

Components / Spare Parts

Catalog page

310063 Headlight KS60, for 310060 and 310061 36

36



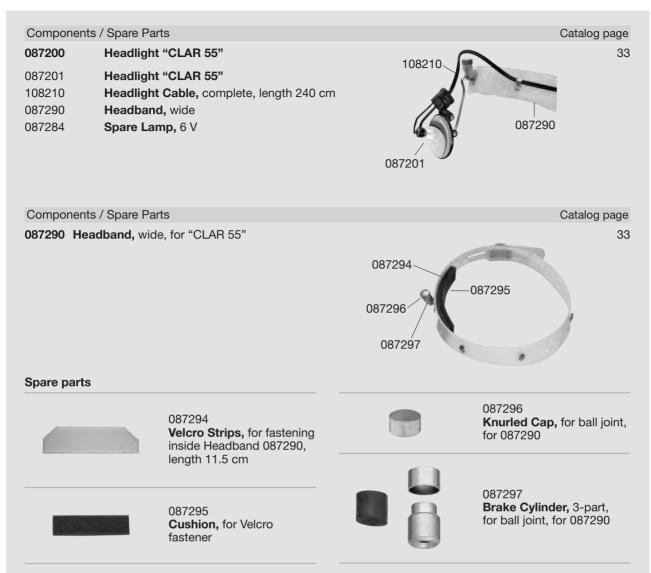
Spare parts



310065 Handle, with focusing screw, sterilizable

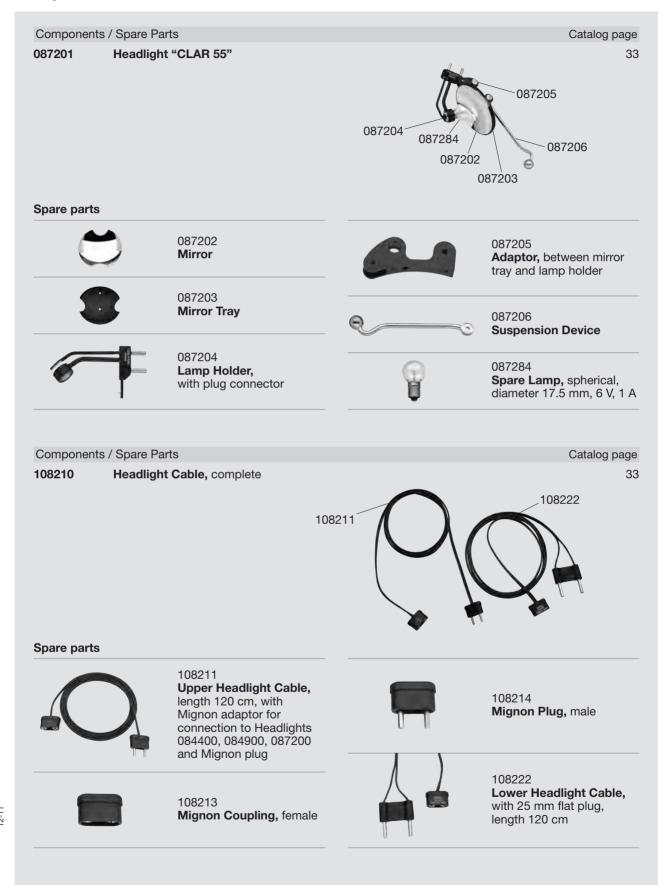
Headlights "CLAR 55"





Headlights "CLAR 55"





PL-SUR-SP 17



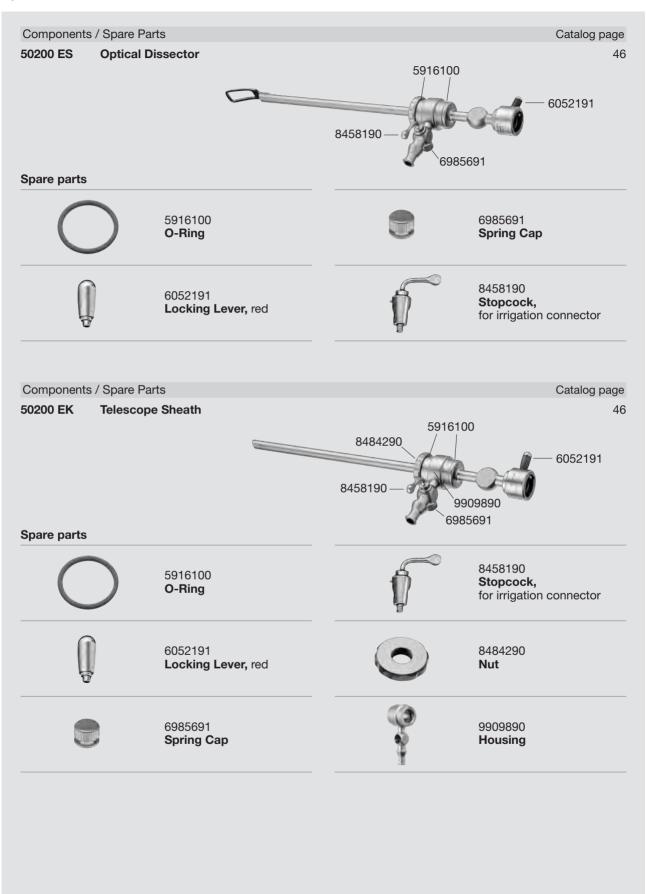


Components / Spare Parts Catalog page 50230 BA HOPKINS® II Forward-Oblique Telescope 30°, enlarged view 50230 BWA HOPKINS® II Wide Angle Forward-Oblique Telescope 30°, enlarged view 45 495 G Spare parts 495 G 495 F Screw Base, Receptacle, for KARL STORZ fiber diameter 9 mm, for Wolf optic light cable and fiber optic light cable Olympus/Winter & Ibe



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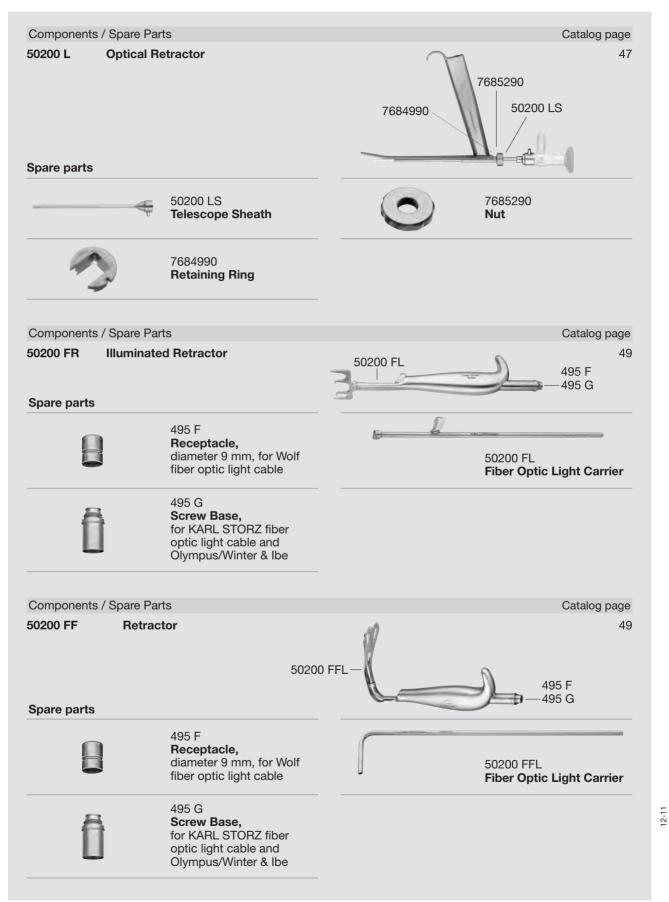




PL-SUR-SP 19 SP 23

Retractors

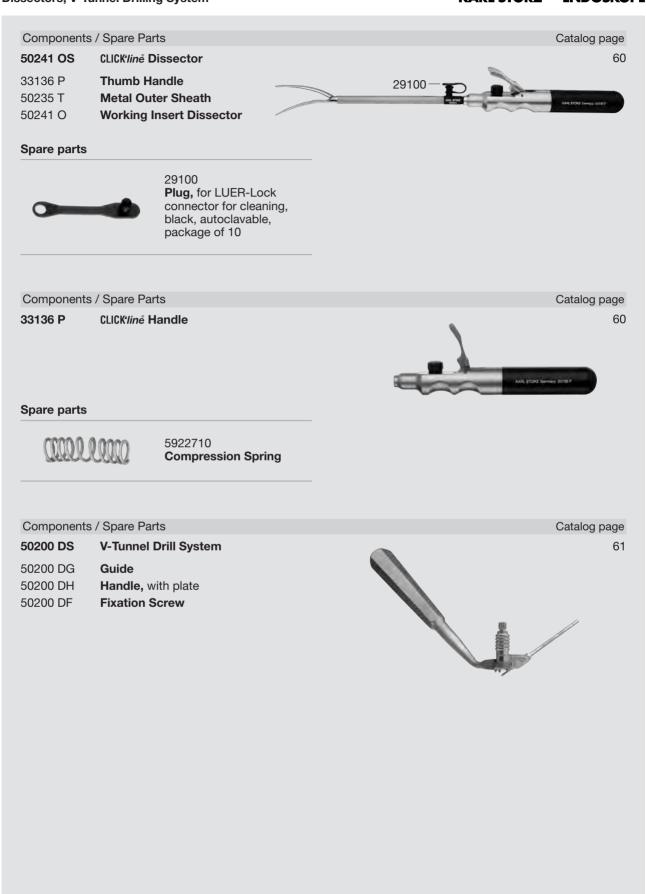




SP 24 PL-SUR-SP 20

STORZ ENDOSKOPE

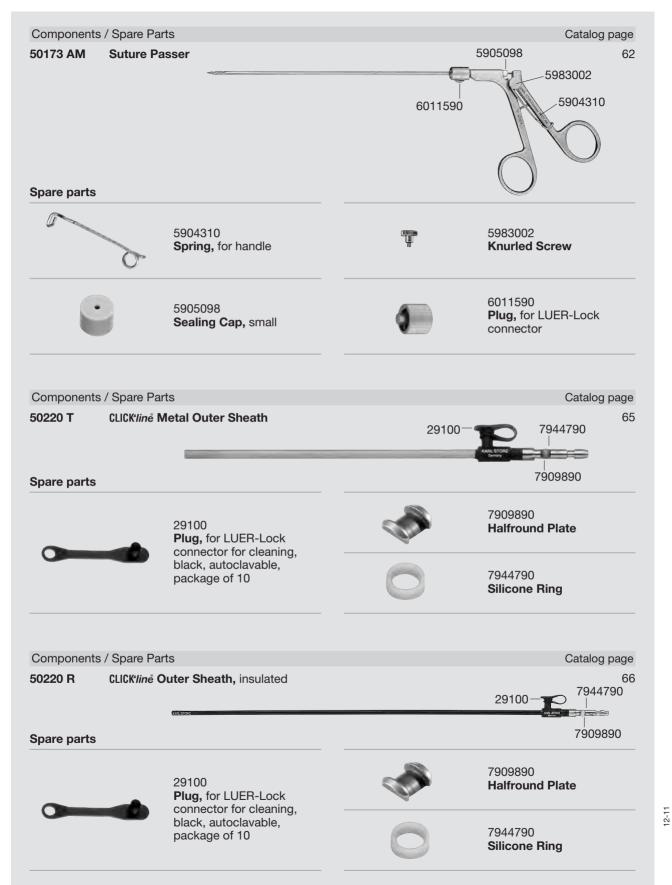
Dissectors, V-Tunnel Drilling System



PL-SUR-SP 21

Suture Passers, Outer Sheaths

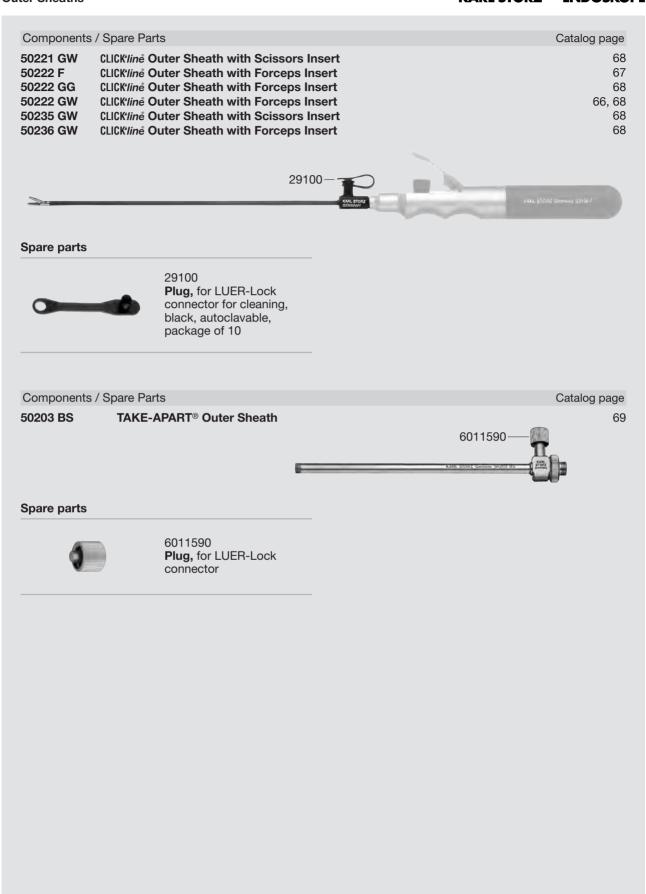




SP 26 PL-SUR-SP 22

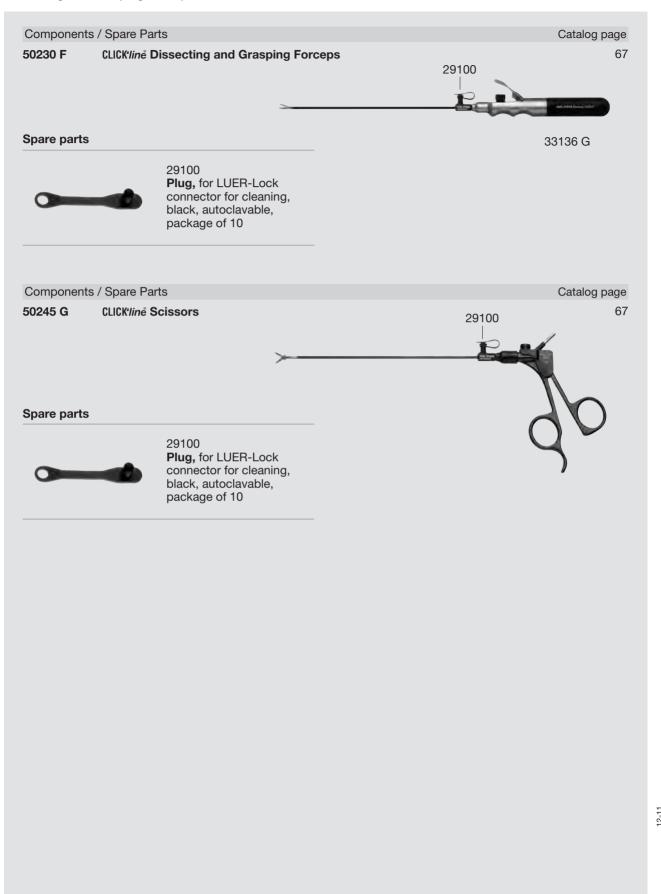
STORZ ENDOSKOPE

Outer Sheaths



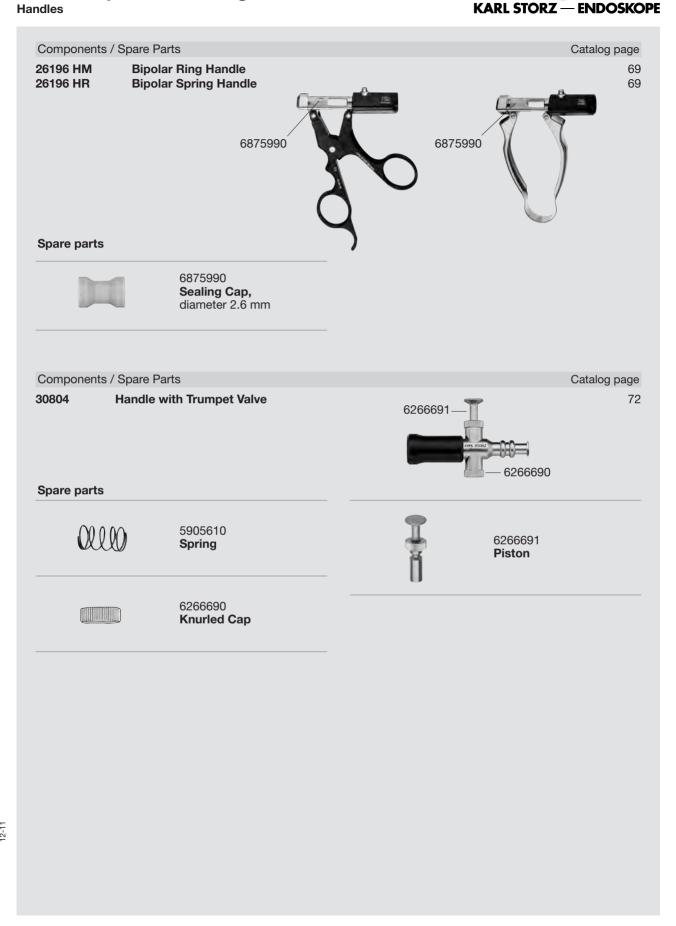
Dissecting and Grasping Forceps, Scissors





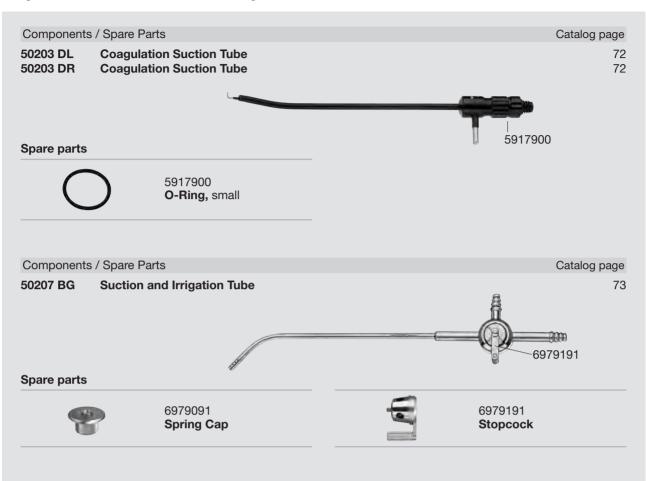






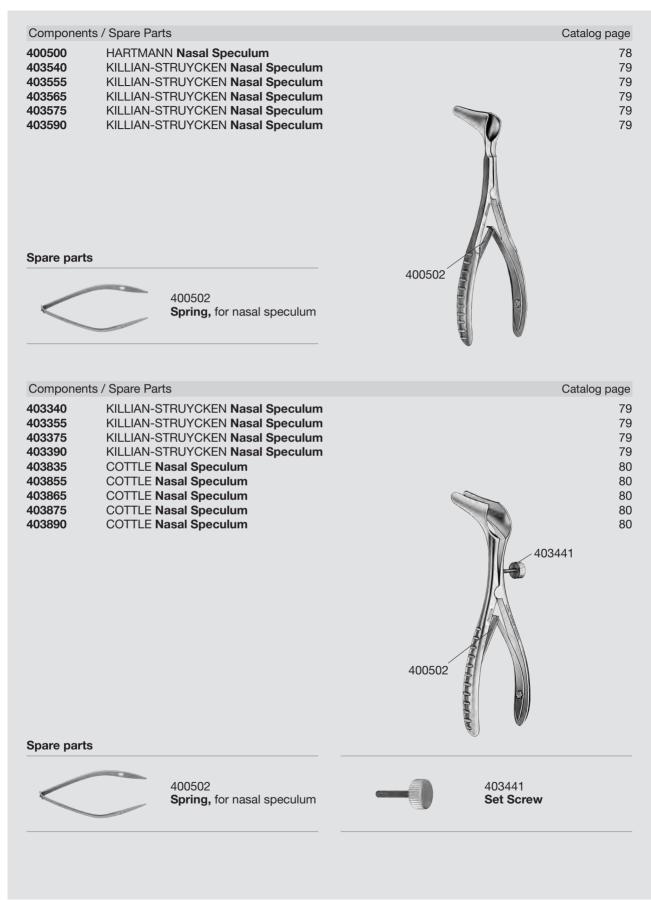
Telescopes and Instruments for Endoscopic Facelifting Coagulation Suction Tubes, Suction and Irrigation Tubes







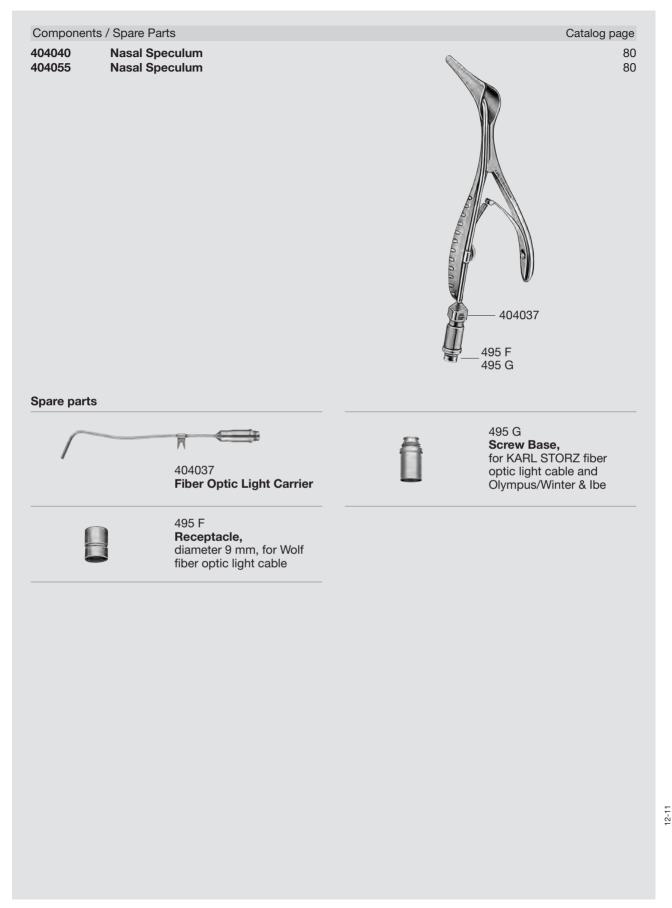




PL-SUR-SP 27 SP 31



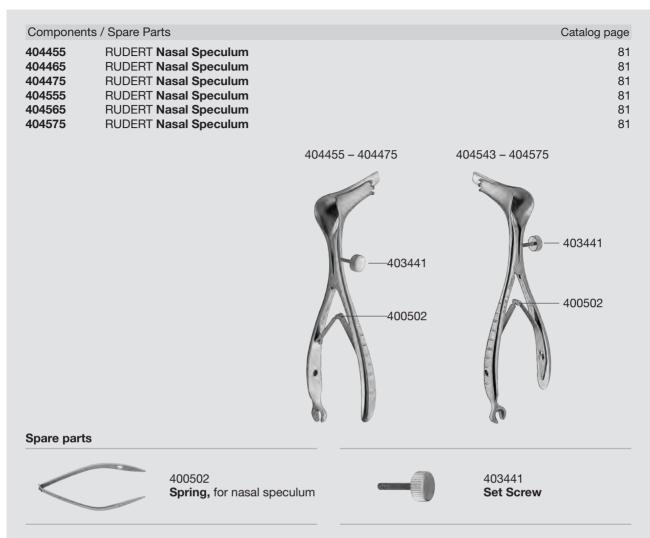




PL-SUR-SP 28

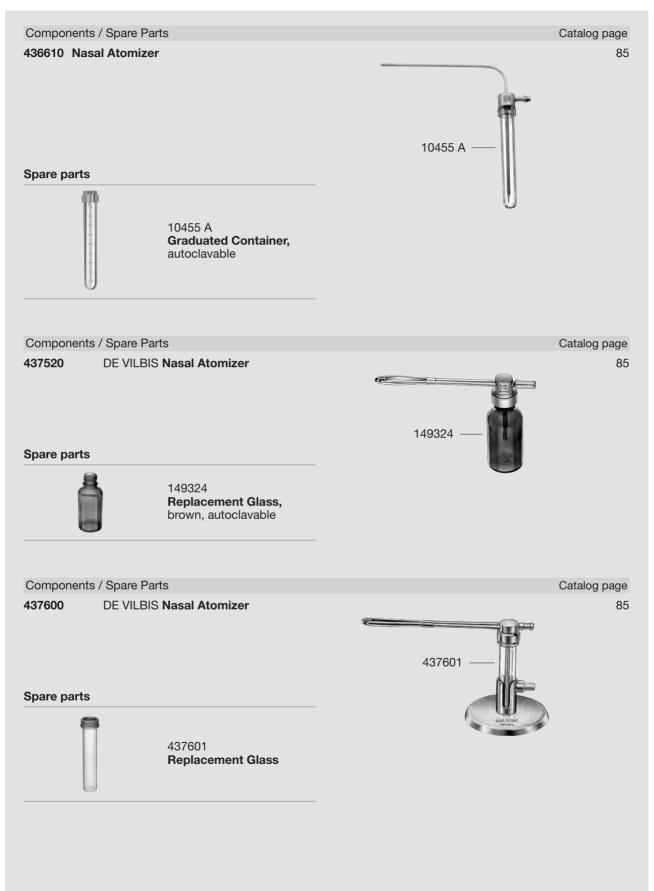






Nasal Atomizers

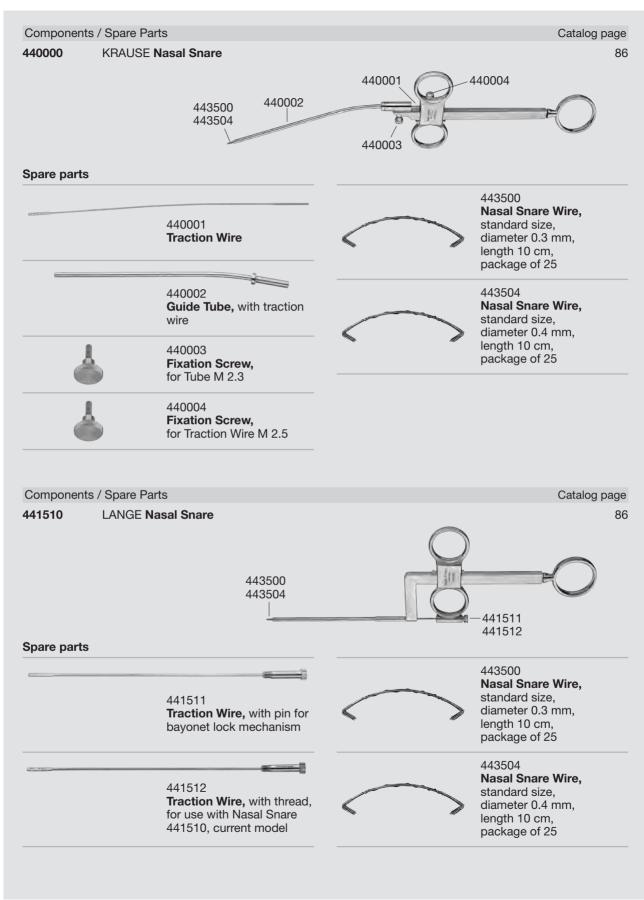




SP 34 PL-SUR-SP 30

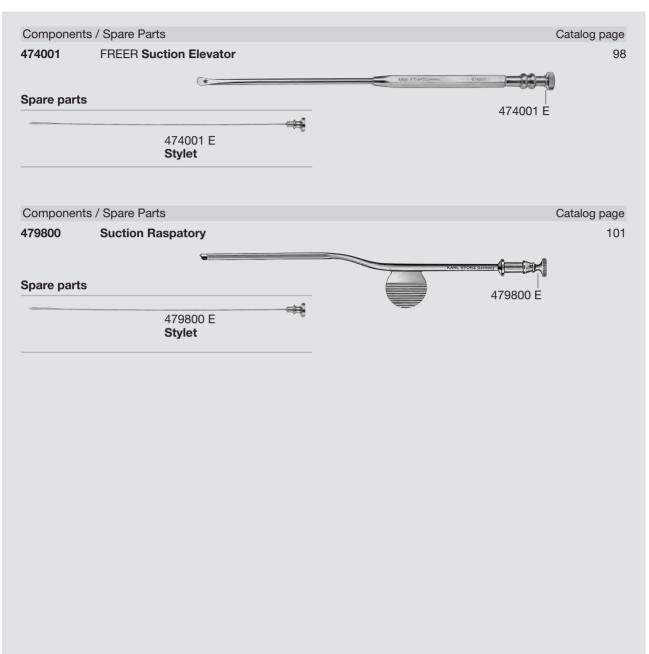






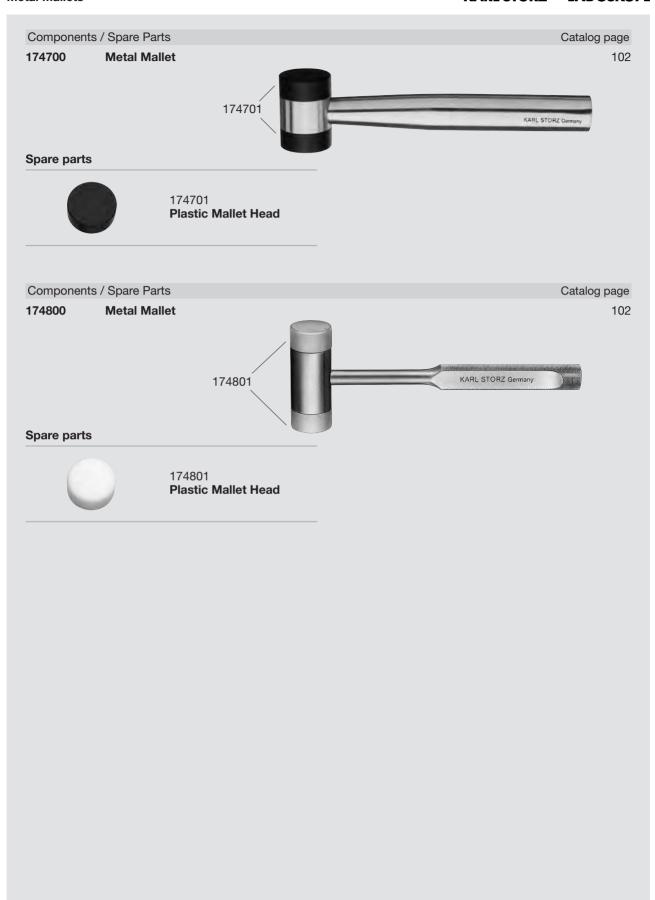








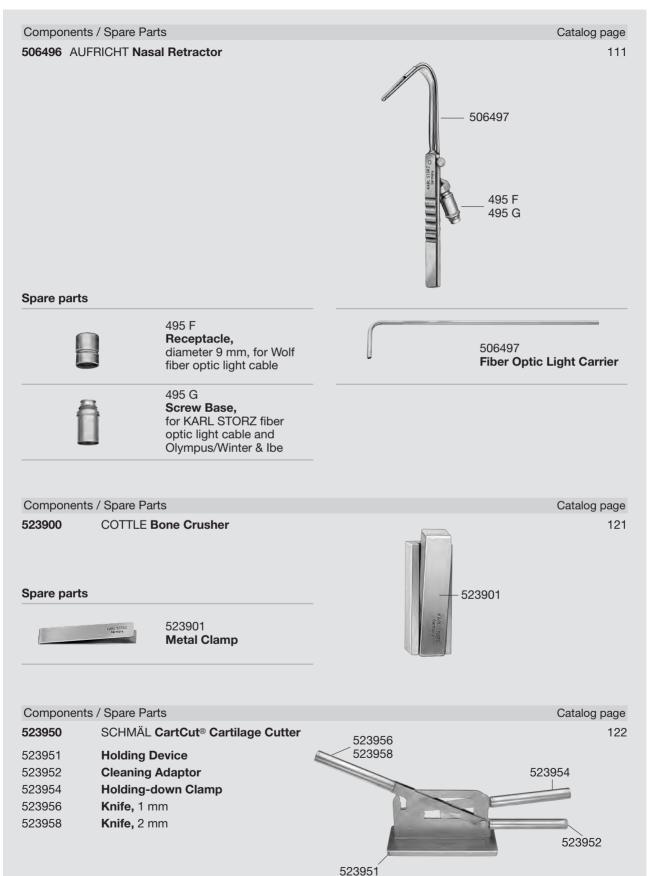
Metal Mallets



AUFRICHT Nasal Retractor, COTTLE Bone Crusher, SCHMÄL CARTCUT® Cartilage Cutter



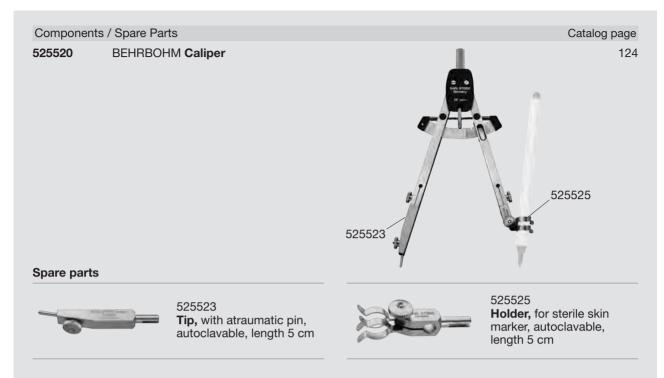
12-11



SP 38 PL-SUR-SP 34

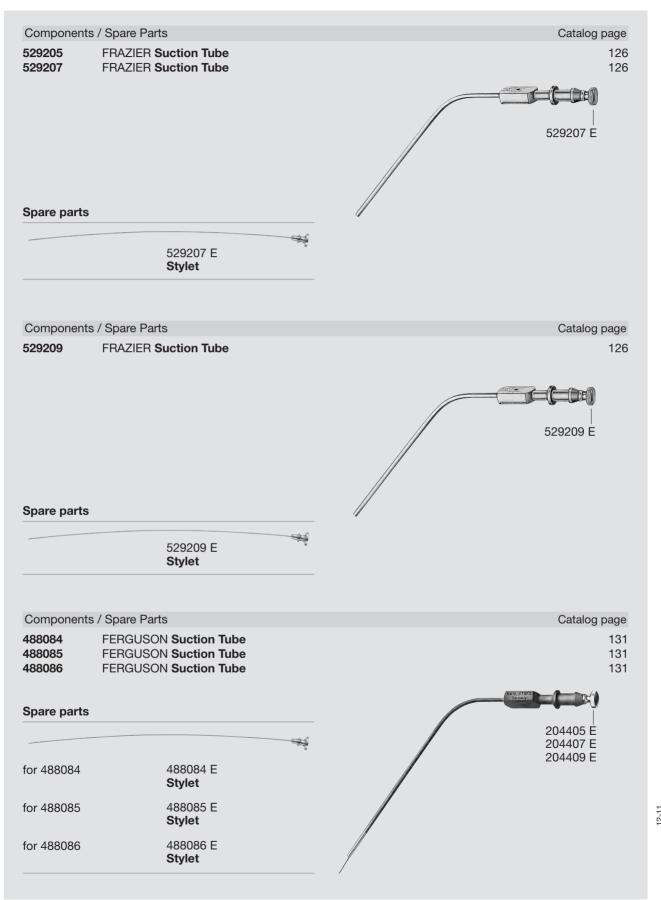






Suction Tubes





SP 40

Hospital Supplies ENT Diagnosis Set, HEINE Otoscope



Component	ts / Spare Parts	Catalog page
826201	ENT Diagnosis Set, for outpatient basic ENT examinations	164



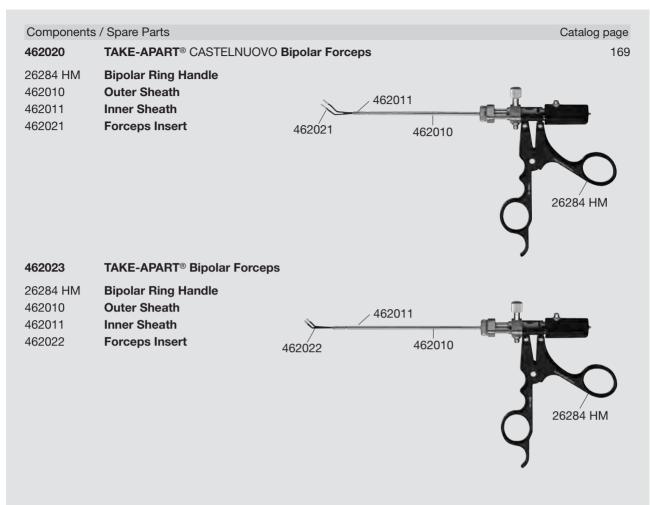
826200	Leather Bag for ENT Diagnosis Set, with divided main compartment and 2 detachable side pockets
138700	Nystagmus Spectacles, small model without illumination
826210	LED Penlight, burning time approx 50 hours in continuous operation with 2 Micro-AAA batteries (included)
126100	Tuning Fork, A1-440, with stand, small model
740116	Tongue Depressor, wooden, width 19 mm, length 16 cm, package of 100

Componer	nts / Spare Parts		Catalog page
121300	HEINE Otoscope		164
121310	Otoscope Head, fiber optic light transmission incorporated	Λ	121310
121302	Ear Speculum, outer diameter 2.5 mm		121320
121303	Ear Speculum, outer diameter 3 mm	121302	<u> </u>
121304	Ear Speculum, outer diameter 4 mm	12 1302	
121305	Ear Speculum, outer diameter 5 mm	Λ	100
121311	Battery Handle	M.	— 121311
121306	1.5 Volt Battery, type R 14 S	101000	
63	Spare Lamp, no. 63, 2.5 V	121303	- 111
		121304	STATE STATE
		121305	

Bipolar and Unipolar Coagulation

TAKE-APART® Bipolar Forceps

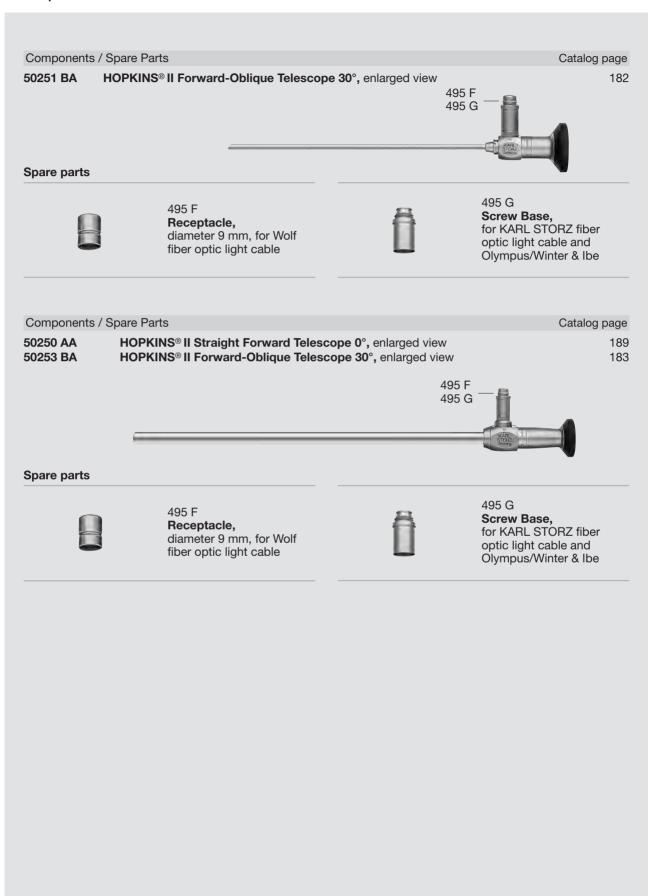




Telescopes and Instruments for Endoscopic Mammaplasty and Abdominoplasty



Telescopes

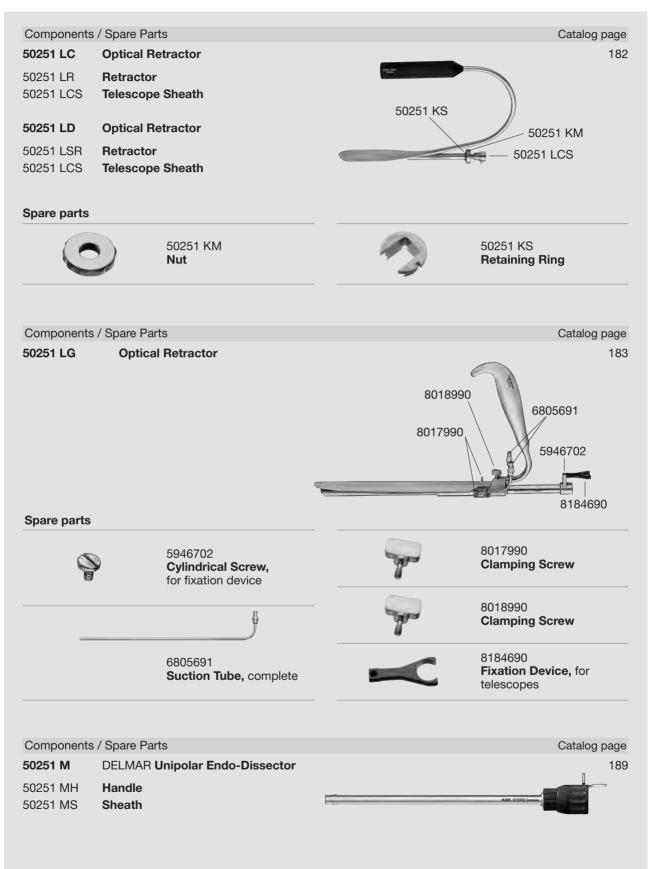


PL-SUR-SP 39

Telescopes and Instruments for Endoscopic Mammaplasty and Abdominoplasty

STORZ ENDOSKOPE

Retractors

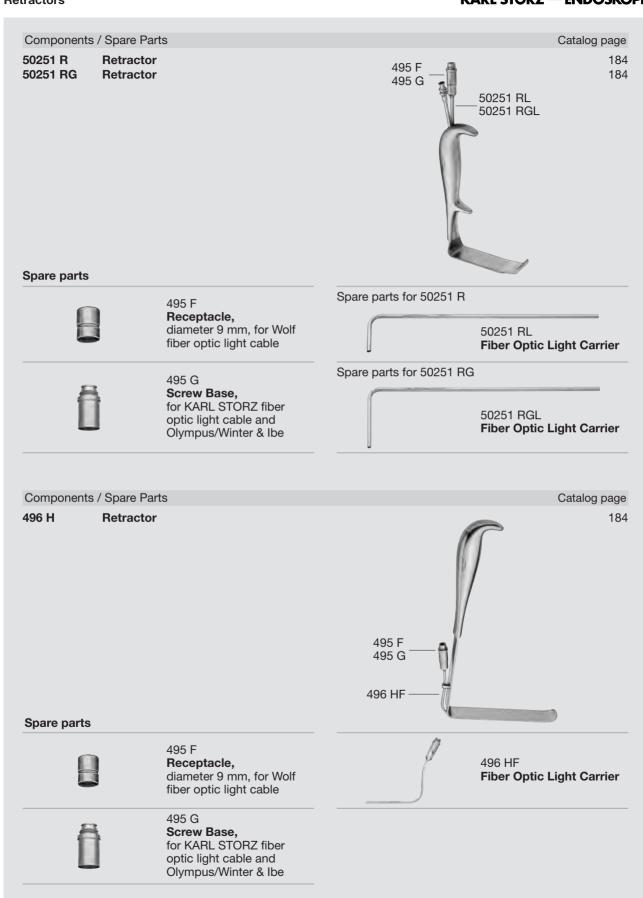


SP 44 PL-SUR-SP 40

Telescopes and Instruments for Endoscopic Mammaplasty and Abdominoplasty



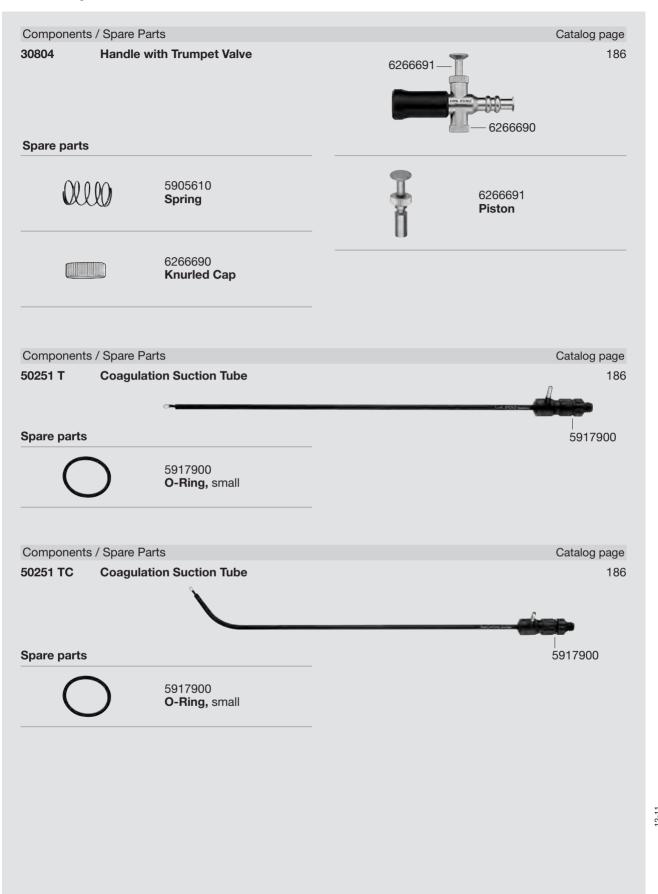
Retractors



Telescopes and Instruments for Endoscopic Mammaplasty and Abdominoplasty

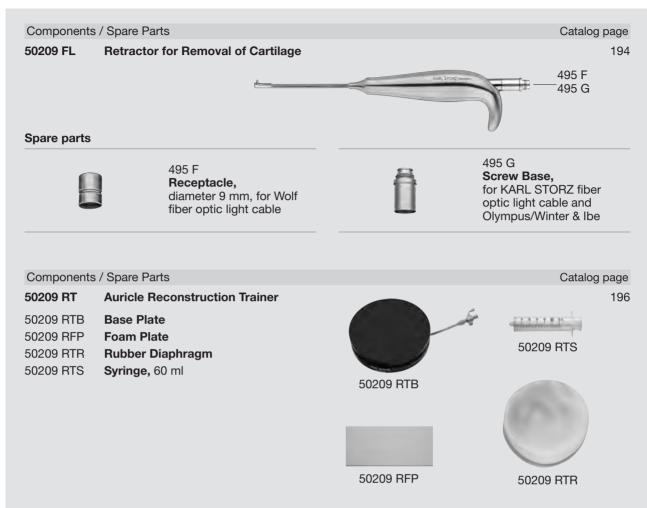
STORZ - ENDOSKOPE

Handles, Coagulation Suction Tubes



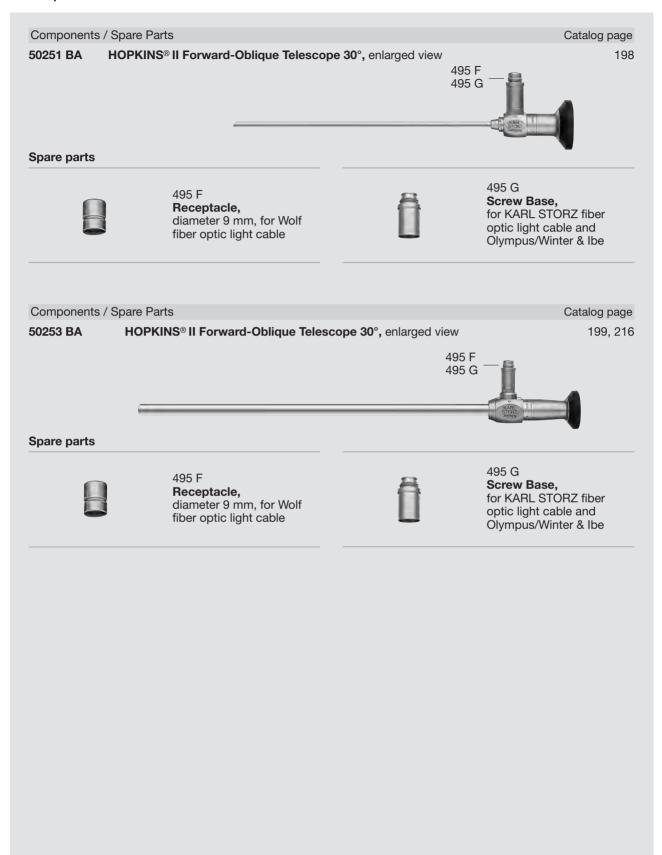
Retractor for Removal of Cartilage, Auricle Reconstruction Trainer







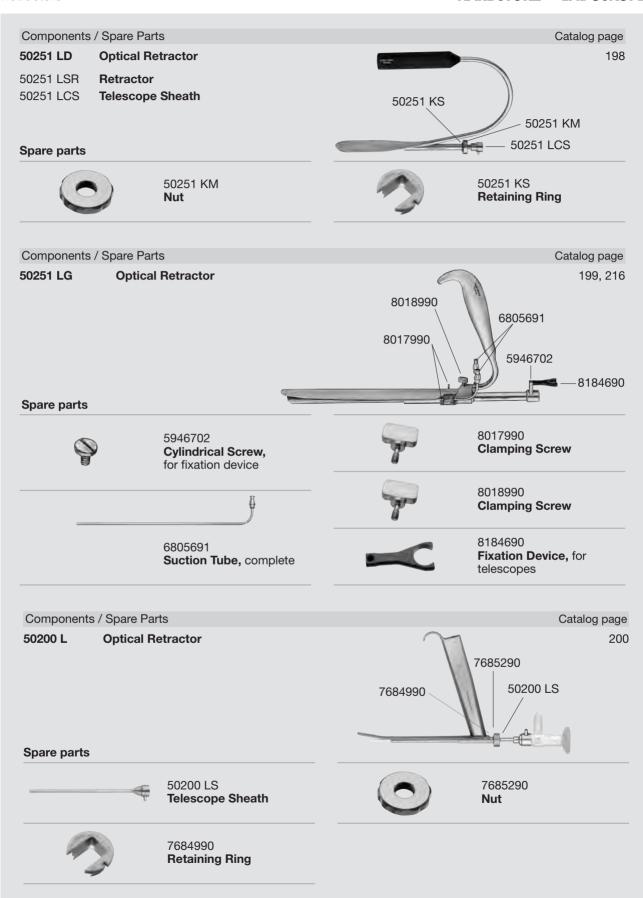
Telescopes



SP 48 PL-SUR-SP 44

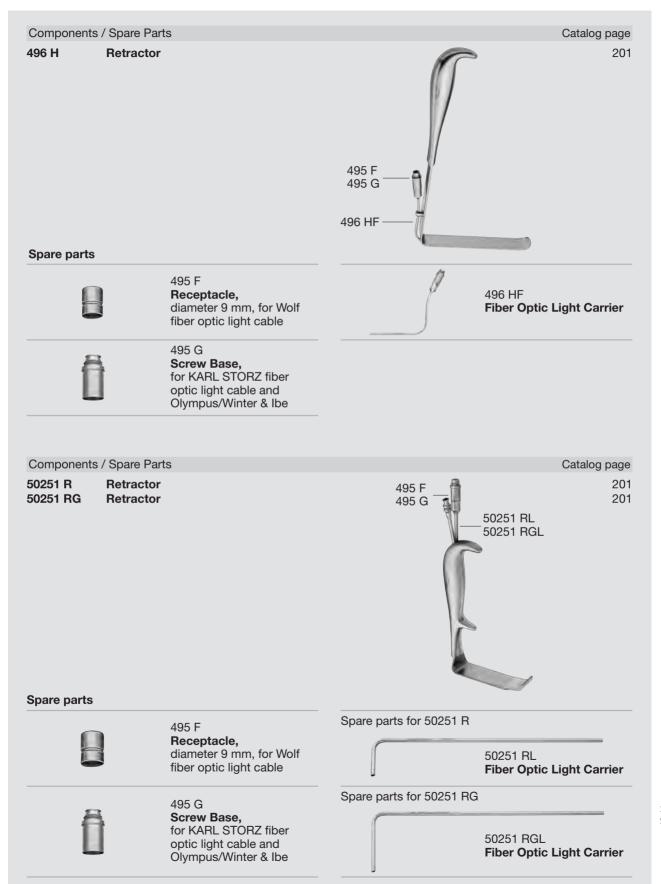


Retractors





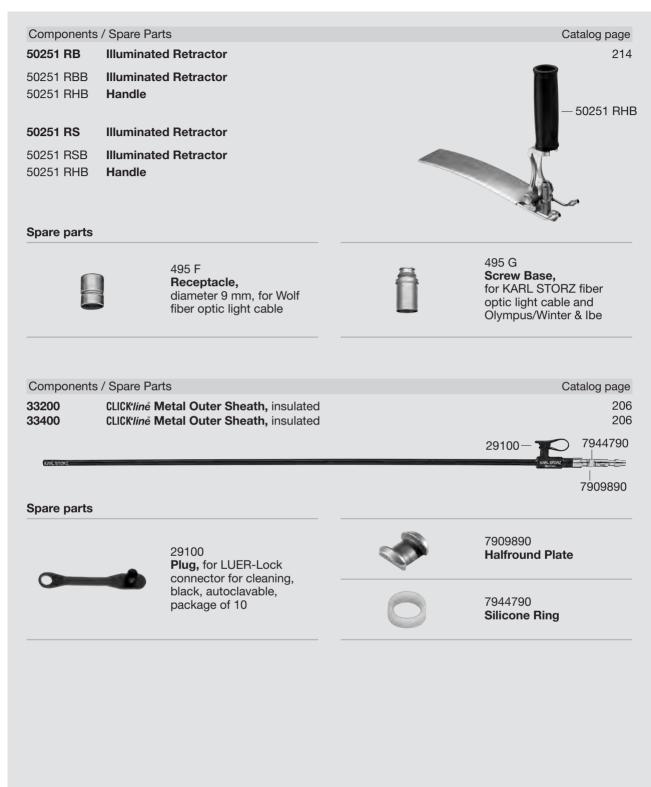




SP 50 PL-SUR-SP 46

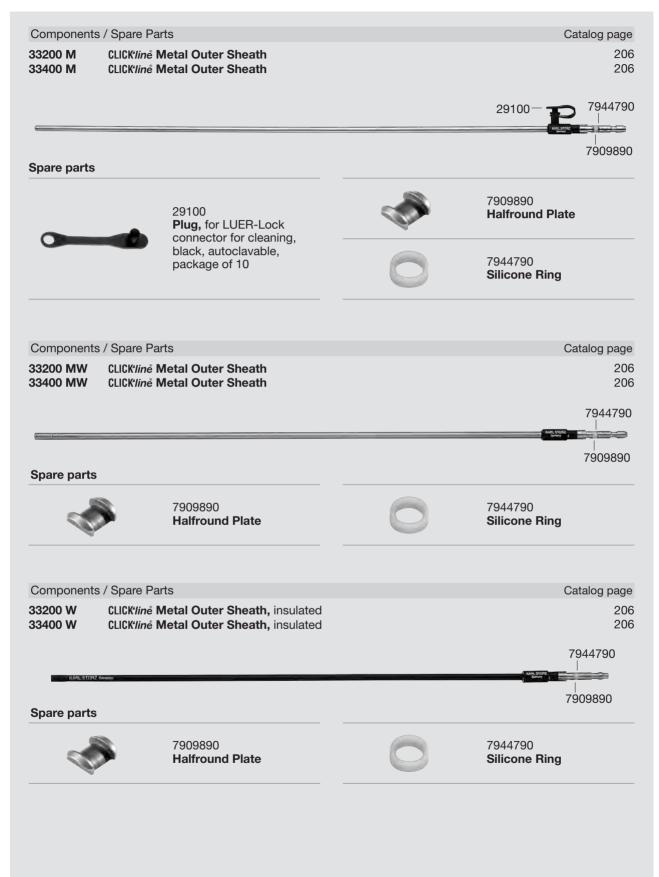
STORZ ENDOSKOPE

Retractors, Outer Sheaths





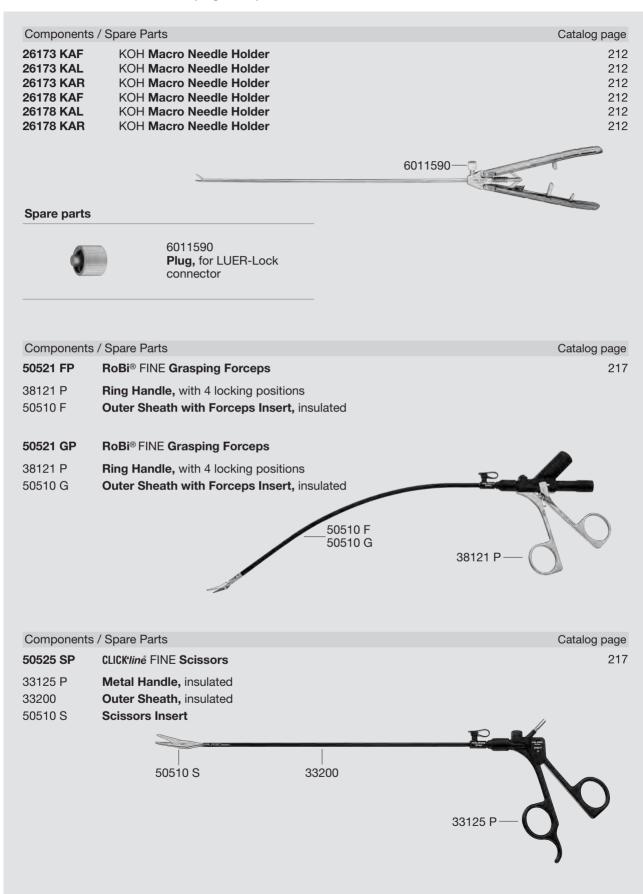




SP 52 PL-SUR-SP 48

STORZ - ENDOSKOPE

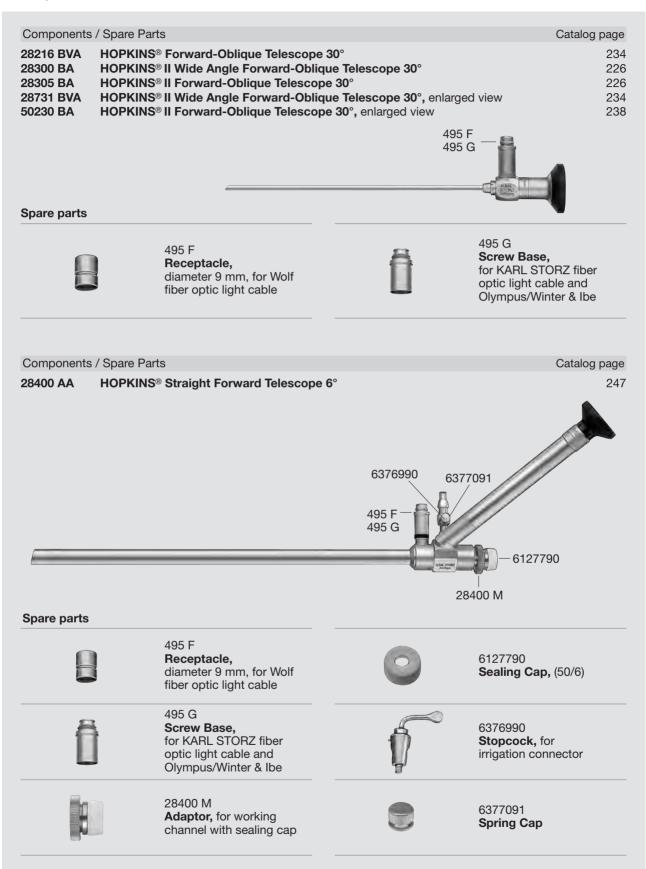
KOH Macro Needle Holders, Grasping Forceps, Scissors



Telescopes



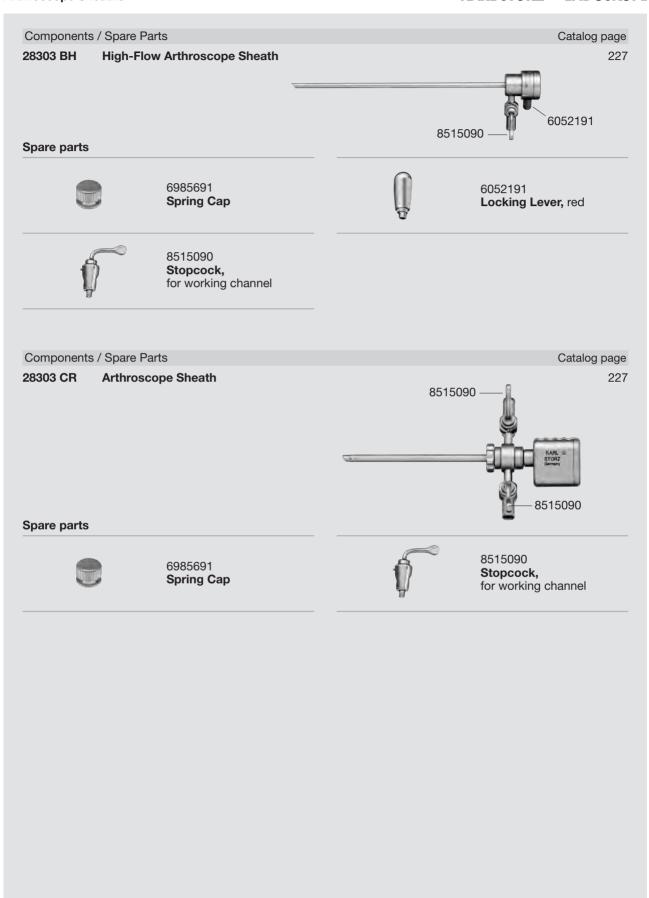
12-11



SP 54 PL-SUR-SP 50



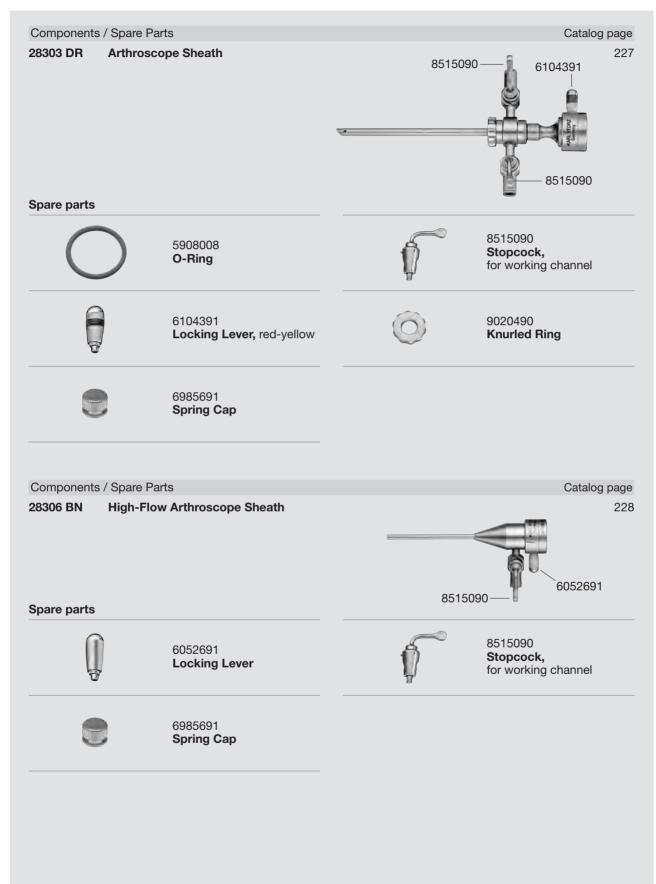
Arthroscope Sheaths



PL-SUR-SP 51

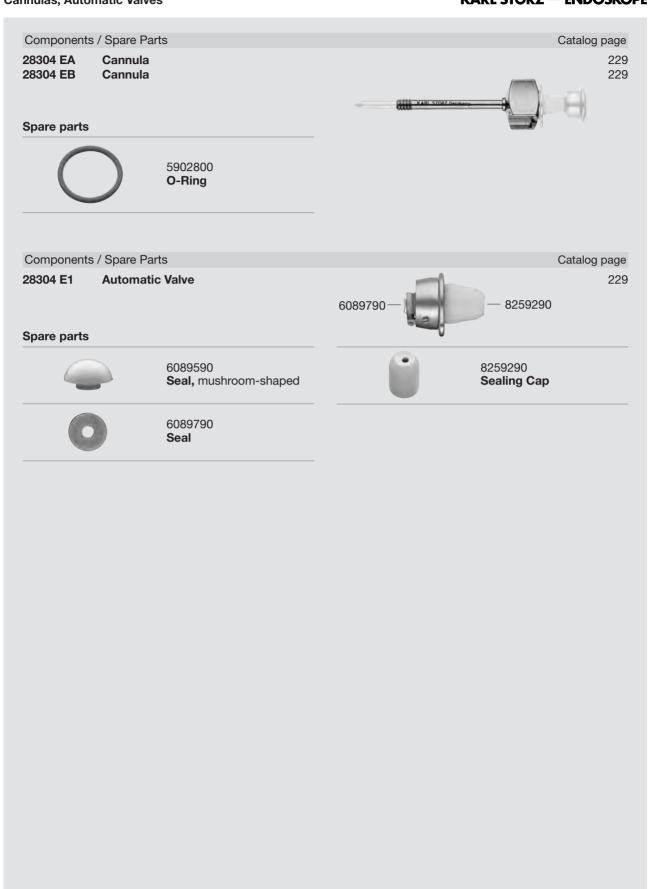
Arthroscope Sheaths





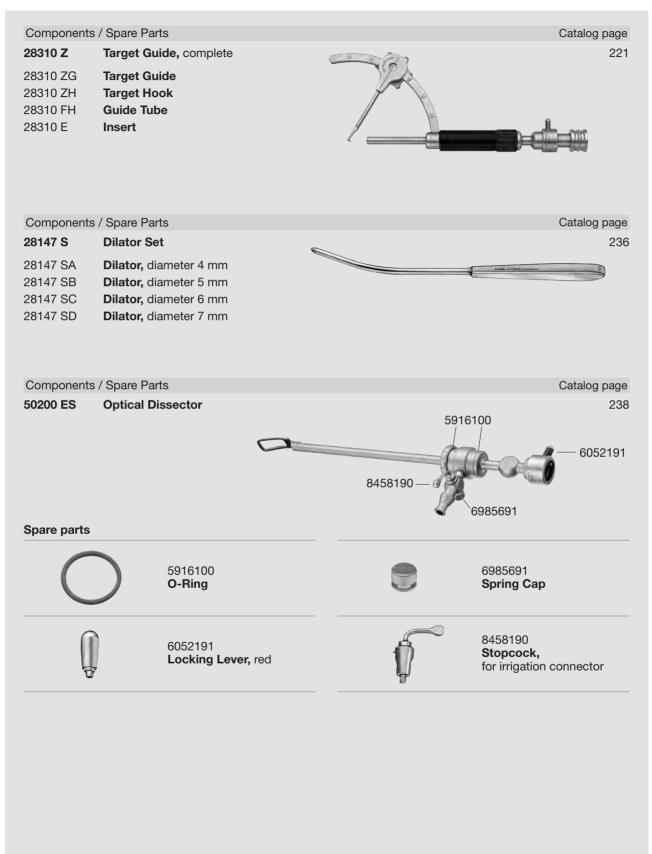


Cannulas, Automatic Valves



Target Guides, Optical Dissectors

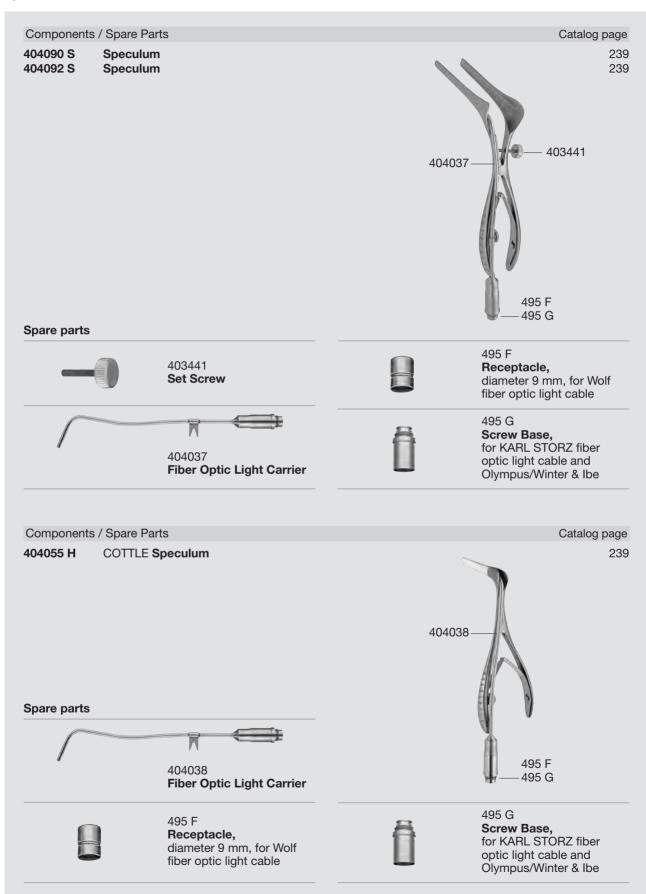




SP 58 PL-SUR-SP 54

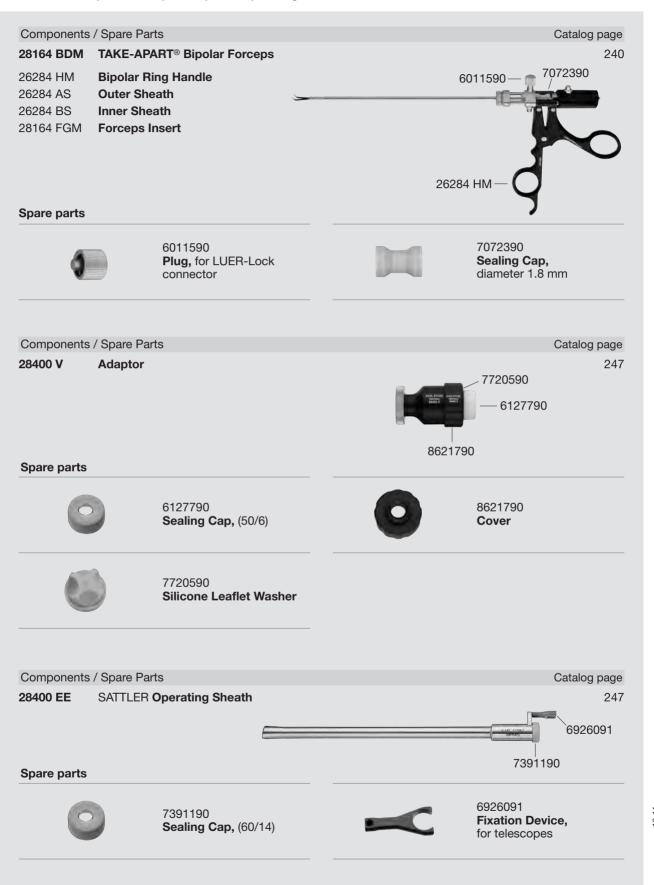






STORZ ENDOSKOPE

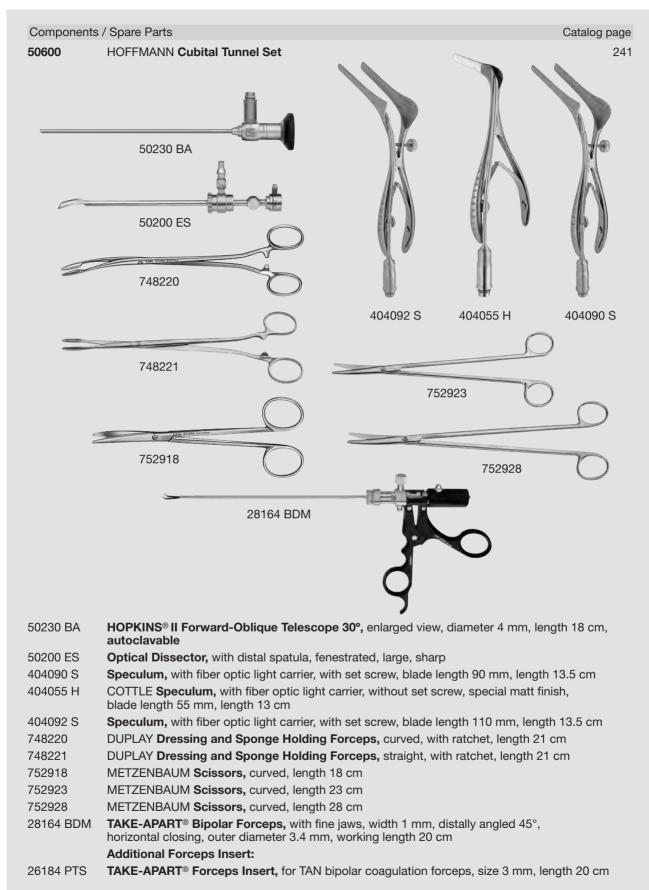
TAKE-APART® Bipolar Forceps, Adaptors, Operating Sheaths



SP 60 PL-SUR-SP 56

Cubital Tunnel Set





Holding Systems

ENDOCRANE®, POINT SETTER®



256

Components / Spare Parts

28272 EH ENDOCRANE®, piezoregulated holding arm

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



Components / Spare Parts

28172 WKS POINT SETTER®, pneumatic holding arm

28172 W POINT SETTER® Arm, with OR table adaptor

28272 UA KSLOCK Adaptor, for clamping jaws

28272 UGN Clamping Jaw, large 28272 UKN Clamping Jaw, small

28272 UF Clamping Jaw, for fiberscopes 2761291 Pressure Regulator, 7 bar

28172 WD Drape, for single use, sterile, package of 10 Catalog page



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

Holding Systems Air Compressors, STOR-E® Transport Cart



20031002	Air Compressor, for POINT SETTER®	263	
20031020	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 200	20031002	
28172 WC	Connecting Tube, length 600 cm, for use with for POINT SETTER® holding system, required pressure setting min. 6 to max. 8 bar	2000 1002	
Components	/ Spare Parts	Catalog pag	
20031002 C	Air Compressor, for POINT SETTER®	263	
20031020 C	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	20031002 G	
27630022	Fabric Reinforced Tube, for connecting CALCUSPLIT® SCB 27 6300 200		
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 0	
Components	/ Spare Parts	Catalog pag	

37 Opare Farts	Catalog page	
STOR-E® Transport Cart, for POINT SETTER	® holding arm 264	
Subrack, for POINT SETTER®	 -	
	20020055	
Top Cover	20020055	
Wire Basket		
	29005 AK —	
	STOR-E® Transport Cart, for POINT SETTER Subrack, for POINT SETTER® Accessory Set, for POINT SETTER® Top Cover	STOR-E® Transport Cart, for POINT SETTER® holding arm 264 Subrack, for POINT SETTER® Accessory Set, for POINT SETTER® Top Cover Wire Basket

Suction and Irrigation Systems

ENDOMAT® LC SCB



Catalog page

U 6

Components / Spare Parts

20330301-1 ENDOMAT® LC SCB

20330320-1 ENDOMAT® LC with KARL STORZ-SCB,

power supply 100 – 240 VAC, 50/60 Hz

400 A Mains Cord, length 300 cm

20330340 **Silicone Tubing Set,** for irrigation, sterilizable Silicone Tubing Set, for suction, sterilizable

20090170 SCB Connecting Cable, length 100 cm

STORZ midsmallC 203503 20

20330320-1

Spare parts



2027390 Mains Fuse, T 1.0 A (SB), package of 10

Components / Spare Parts

Catalog page

U 6

20330341 Silicone Tubing Set, for suction, sterilizable



Spare parts



20330393

Pump Tube, sterilizable, package of 25



20300482 **Connector Set,** sterilizable, package of 2

Suction and Irrigation Systems





Catalog page

U 8

Components / Spare Parts

20321008 DUOMAT®

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

20300045 Silicone Tubing Set, for irrigation

Catalog page U 11

Spare parts



600008 LUER-Lock Tube Connector, female, tube diameter 6 mm

Components / Spare Parts

20300046 Silicone Tubing Set

Catalog page

U 11

Spare parts



20330088

Puncture Needle, for irrigation bottle



600007 LUER-Lock Tube Connector, male, tube diameter 6 mm

* mtp

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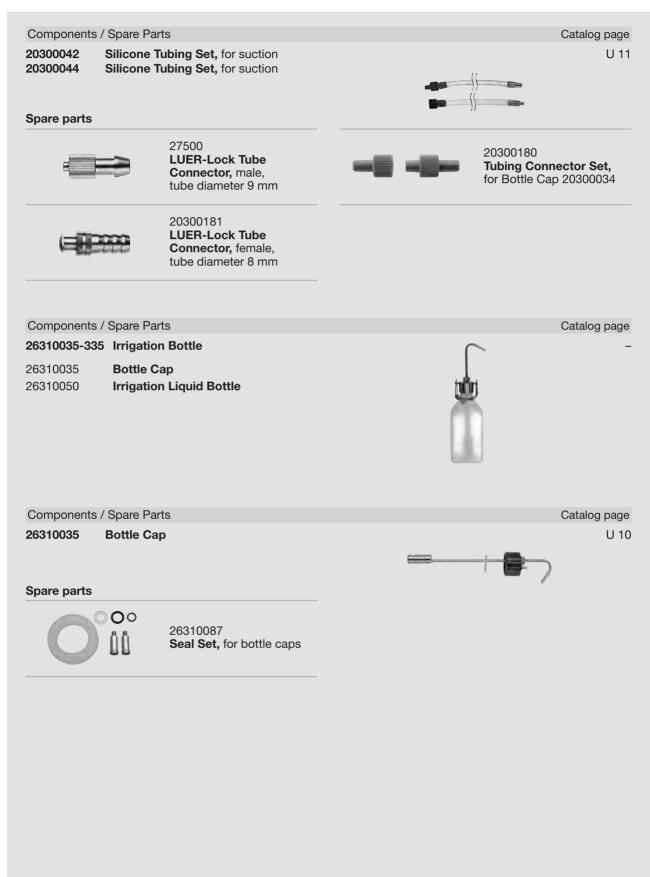
PL-SUR-SP 61

SP 65

Suction and Irrigation Systems

DUOMAT®





Motor Systems

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



Components / Spare Parts

Catalog page

U 18

U 18

40701601-1 KARL STORZ UNIDRIVE® S III ENT SCB

40701620-1 UNIDRIVE® S III ENT with

KARL STORZ-SCB

400 A Mains Cord 20711680 Irrigator Rod

20016630 **Two-Pedal Footswitch,** two-stage,

with proportional function

20711640 **Silicone Tubing Set,** for irrigation,

sterilizable

20711621 Clip Set, for use with silicone tubing

set 20711640

20090170 SCB Connecting Cable, length

100 cm

031131-01* Single Use Tubing Set, sterile,

package of 3



40701620-1

40701401 UNIDRIVE® S III ECO

40701420 **UNIDRIVE® S III ECO,**

power supply 100 – 120, 230 – 240 VAC, 50/60 Hz

400 A Mains Cord

20016630 Two-Pedal Footswitch,

two-stage, with proportional

function

20711640 Silicone Tubing Set, for

irrigation, sterilizable

20711621 Clip Set, for use with silicone

tubing set 20711640



40701420

Spare parts



2027590 Mains Fuse, T 2.0 AL (SB), package of 10



2107890 **Fuse Holder**, for power supply socket



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High Frequency Electrosurgical Units

AUTOCON® II 400 SCB



Catalog page

U 40

Components / Spare Parts

2053520x-12x AUTOCON® II 400 SCB

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

SCB[®]

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

2053522x-12x 2053522xU12x

Spare parts for use at 230 V:

2027690 Mains Fuse, T 4.0 AL (SB), package of 10 Spare parts for use at 110 V:



2028090 Mains Fuse, T 8.0 AL (SB), package of 10

High Frequency Electrosurgical Units

AUTOCON® II 200, AUTOCON® II 80



Catalog page

U 42

Components / Spare Parts

20532201 AUTOCON® II 200

20532220 AUTOCON® II 200,

power supply 200 - 240 VAC, 50/60 Hz

400 A Mains Cord, length 300 cm

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 parts for use at 230 V:



2027690 Mains Fuse, T 4.0 AL (SB), package of 10 Spare parts for use at 110 V:



2028090 Mains Fuse, T 8.0 AL (SB), package of 10

Components / Spare Parts

20530801 AUTOCON® II 80

20530820 AUTOCON® II 80.

power supply 100 - 240 VAC, 50/60 Hz

400 A Mains Cord, length 300 cm

Spare parts



2027690 Mains Fuse, T 4.0 AL (SB), package of 10 Catalog page

U 44



20532220

20532220-010

20532220C 20532220C010

20530820





Component 20530008	s / Spare Parts Surgery Electrodes Set	Catalog page U 47
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	0
26520035	MAGENAU Knife Electrode, angled	*ARL STORE **Compage ** 1000-0000
26520036	MAGENAU Knife Electrode, lancet-shaped	
26520037	Ball Electrode, 2 mm	
26520038	Ball Electrode, 4 mm	
26520039	Ball Electrode, 6 mm	
26520040	Needle Electrode	20530031
26520041 26520042	Flat Electrode, 8 x 10 mm Flat Electrode, 10 x 15 mm	
		26520032 26520033 26520034 26520035
	•	26520036
		26520037
		26520039
		26520040
		26520041

2-11

26520042





KARL STORZ OR1 NEO® ERGONOMICS, SAFETY AND EFFICIENCY IN THE OR

The KARL STORZ OR1 NEO® objective is to provide an optimal operating room design for performing minimally invasive and conventional surgeries. Customized to meet disciplinary and interdisciplinary needs, the OR1 NEO® operating room concept offers the optimal solution to each requirement for an integrated OR workstation design. The system's modular design allows all components and functionalities to be integrated in the OR1 NEO® operating room solution and, therefore, become part of the workstation system. Once again, KARL STORZ sets new standards in ergonomics, safety and efficiency in the OR.

- System integration
- Data management and documentation
- **■** Telemedicine

The OR1 NEO® components provide a customized system and compatible applications. Each component offers a reliable solution on its own; the sum of all components forms a complete multifunctional system.

TELEPRESENCE

- Imaging systems
- Illumination



FULL HD - New Vision in Medicine

IMAGE 1 HUB® HD offers the user the highest image quality for the precise display of even the finest tissue and vascular structures.

IMAGE 1 HUB® HD enables the connection of the latest HD camera heads and all standard IMAGE 1® camera heads.

Existing IMAGE 1® can be updated to enable HD images to be displayed and HD camera heads to be utilized.

KARL STORZ WIDEVIEW® monitors deliver **optimal image display.** Using the 16:10 aspect provides a larger display window and improves the viewing ergonomics.

HUMAN MEDICINE DVD

The KARL STORZ Product Line encompasses Endoscopes, Instruments, Accessories, Units and Imaging Systems for the full range of Human Medicine Specialties:

- Neuro-Endoscopy
- Oral and Maxillofacial Surgery
- Endoscopes and Instruments for ENT, Esophagoscopy & Bronchoscopy
- Plastic Surgery
- Endoscopes for Anesthesiology and Emergency Medicine
- Endoscopes and Instruments for Cardiovascular Surgery
- Thorax
- Gastroenterology
- Laparoscopy
- Gynecology
- Urology
- Proctology
- Arthroscopy, Sports Medicine & Spine Surgery
- Pediatric Surgery
- KARL STORZ OR1®
- Telepresence

PROTECTION 1®

- Field Service Technician Program
- On-Site Services Program
- No-Fault Service Plans
- Custom Service Solutions
- Platform for Staff Training Academy of Clinical Education

PROECTION 1® Services delivers comprehensive solutions to assist you in ensuring optimum surgical performance, asset management, and cost savings. Choose KARL STORZ as your Service Partner and focus on what really matters – patient care.