Visualization and Instruments
for Keyhole Neurosurgery
Visualization and Instruments for Keyhole Neurosurgery

The telescopes and instruments from KARL STORZ for minimally invasive approaches in microneurosurgery are designed to display even the tiniest structures in narrow spaces. The main fields of application are intracranial expansive and vascular lesions. Minimally invasive approaches are particularly suited for treating deep-seated and small tumors in the anterior cranial fossa, the suprasellar and parasellar regions as well as the middle and posterior cranial fossa.

* Source: Prof. Reisch, Prof. Hopf, Klinik Hirslanden, Switzerland

The VITOM® 3D in particular provides a revolutionary solution for the visualization of neurosurgical interventions. Application possibilities are similar to that of the operating microscope. The surgeon can work comfortably via a 3D monitor which allows for a relatively free choice of working positions. The most important functions are controlled via the IMAGE1 PILOT, which is mounted on the OR table in close proximity to the surgeon.

* Source: Prof. Reisch, Prof. Hopf, Klinik Hirslanden, Switzerland

* Rapid switch between the VITOM® 3D and endoscopic imaging in 2D and 3D:
The image on the left shows the VITOM® 3D in use and the image on the right shows endoscopy – both types of visualization require only one video tower, i.e. the surgeon does not have to change working positions and does not need to switch from the ocular to the monitor or vice versa.
EAM (Endoscopically-Assisted Microneurosurgery) is primarily used in minimally invasive keyhole approaches. In this specific technique, endoscopes are used in combination with the VITOM® 3D system or the operating microscope. The VITOM® 3D or the microscope illuminates and magnifies the superficial sectors of the operative field whereas the endoscope provides a targeted visualization of deeper-lying structures. The contribution of endoscopy to standard microsurgery is based on its ability to better identify anatomical structures under limited viewing angles and in blind areas around corners.

The IMAGE1 S™ camera platform from KARL STORZ provides an imaging chain that is compatible with the VITOM® 3D and can offer a combination of endoscopic imaging in 2D and 3D. For the surgeon, this means that all types of visualization are available using only one video tower. It is possible to switch between the VITOM® 3D and endoscopy in a quick and ergonomic manner.

This brochure lists all options in accordance with the product type (VITOM® 3D, endoscopes in 3D and 2D, coagulation instruments, suction instruments, forceps, curettes, scissors, etc.). This allows neurosurgeons to easily configure an instrument set according to individual needs or to complete existing equipment in order to expand the range of indications or to perform even more minimally invasive procedures.

To compile an instrument tray, the user can follow the steps below and choose from the various instrument categories:

**Visualization and Lens Cleaning**

**Suction Tubes and Coagulation**

**Instruments**

**Holding Systems**

**Motor System**

* Source: Prof. Schroeder, Universitätsklinikum Greifswald, Germany
Visualization and Lens Cleaning

VITOM® 3D

TH 200  VITOM® 3D, with zoom and focus function, integrated illumination and horizontal alignment, working distance 20-50 cm, fiber optic light transmission incorporated, suitable for wipe disinfection, for use with IMAGE1 S CONNECT™ + IMAGE1 S D3-LINK™ + IMAGE1 PILOT

TC 014  IMAGE1 PILOT, control unit with 3D wheel, 4 programmable function keys and USB port, for intuitive control of camera systems and connected units, for use with IMAGE1 S™ and VITOM® 3D TH 200

Use of the IMAGE1 PILOT is mandatory for VITOM® 3D. The VITOM® 3D system and IMAGE1 PILOT are always used with a holding system.

Further information on holding systems is available in the final chapter of this brochure or in the Telepresence catalog.
Visualization and Lens Cleaning

Overview of VITOM® 3D

- VITOM® 3D with integrated illumination
- Fiber Optic Light Cable
- Holding Arm for VITOM® 3D
- Sterile Cover for VITOM® 3D
- IMAGE1 PILOT Sterile Cover
- IMAGE1 S™ Camera System
- Cold Light Fountain Power LED 300 SCB
- Holding Arm for IMAGE1 PILOT
- 3D Monitors
- 3D Polarization Glasses
- 3D Clip-on Glasses

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Visualization and Lens Cleaning

TIPCAM®1 S 3D NEURO

3D telescope with 4 mm sheath diameter

With TIPCAM®1 S 3D, KARL STORZ sets new standards in 3D endoscopy with its brilliant, three-dimensional display. As part of the modular IMAGE1 S™ camera platform, the existing system can be easily upgraded to 3D.

0° 28164 AA 3D* TIPCAM®1 S 3D NEURO, direction of view 0°, diameter 4 mm, length 18 cm, two FULL HD image sensors, autoclavable, S-Technologies available, freely programmable camera head buttons, including video connecting cable, for use with IMAGE1 S™

30° 28164 BA 3D* TIPCAM®1 S 3D NEURO, direction of view 30°, diameter 4 mm, length 18 cm, two FULL HD image sensors, autoclavable, S-Technologies available, freely programmable camera head buttons, including video connecting cable, for use with IMAGE1 S™

* Currently not available on CE markets
Visualization and Lens Cleaning

Angled Telescopes

The telescopes with 45° angled eyepieces provide excellent intraoperative imaging and also offer the operating surgeon an optimal view of the surgical field as well as blind areas around corners.

HOPKINS® Telescope, diameter 2.7 mm, length 15 cm, autoclavable, angled eyepiece, fiber optic light transmission incorporated

<table>
<thead>
<tr>
<th>Angle</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0°</td>
<td>28162 AUA</td>
<td>HOPKINS® Straight Forward Telescope 0°, color code: green</td>
</tr>
<tr>
<td>30°</td>
<td>28162 BOA</td>
<td>HOPKINS® Forward-Oblique Telescope 30°, enlarged view, direction of view in 12 o’clock position, color code: red</td>
</tr>
<tr>
<td>30°</td>
<td>28162 BUA</td>
<td>Same, direction of view in 6 o’clock position</td>
</tr>
</tbody>
</table>
Visualization and Lens Cleaning

Angled Telescopes

HOPKINS® Telescope, diameter 2.7 mm, length 20 cm, autoclavable, angled eyepiece, fiber optic light transmission incorporated

0°
28162 AKA  HOPKINS® Straight Forward Telescope 0°, enlarged view, color code: green

30°
28162 BKA  HOPKINS® Forward-Oblique Telescope 30°, enlarged view, color code: red

45°
28162 FKA  HOPKINS® Forward-Oblique Telescope 45°, enlarged view, color code: black

70°
28162 CKA  HOPKINS® Lateral Telescope 70°, enlarged view, color code: yellow

HOPKINS® Telescope, diameter 4 mm, length 20 cm, autoclavable, angled eyepiece, fiber optic light transmission incorporated

0°
28162 AVA  HOPKINS® Straight Forward Telescope 0°, enlarged view, color code: green

30°
28162 BVA  HOPKINS® Forward-Oblique Telescope 30°, enlarged view, color code: red

45°
28162 FVA  HOPKINS® Forward-Oblique Telescope 45°, enlarged view, color code: black
Visualization and Lens Cleaning

CLEARVISION® II for intraoperative cleaning of the front lens

403341 01  CLEARVISION® II Set, lens irrigation system for endoscopes, power supply 100-240 VAC, 50/60 Hz
including:
Mains Cord
One-Pedal Footswitch
Tubing Set, sterile, for single use, sterile, package of 3
Visualization and Lens Cleaning
CLEARVISION® II Irrigation and Suction Sheaths

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

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

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

7230 AS*  **Irrigation and Suction Sheath 0°**, outer diameter 4.8 x 6 mm, working length 14 cm, for use with HOPKINS® Telescopes 7230 AA, 28132 AA, TIPCAM® S 3D 7240 AA 3D, TIPCAM® S 3D 28164 AA 3D NEURO and KARL STORZ lens irrigation system CLEARVISION® II

7230 BS*  **Irrigation and Suction Sheath 30°**, outer diameter 4.8 x 6 mm, working length 14 cm, for use with HOPKINS® Telescopes 7230 BA, 28132 BA, TIPCAM® S 3D 7240 BA 3D, TIPCAM® S 3D 28164 BA 3D NEURO and KARL STORZ lens irrigation system CLEARVISION® II

* Note: In the CE region, not for use in direct contact with the central nervous system
Visualization and Lens Cleaning

Irrigation Sheaths

28164 CAK  **Irrigation Sheath**, outer diameter 3.8 mm, working length 15 cm, for use with HOPKINS® Telescope 0° 28162 AKA and KARL STORZ lens irrigation system CLEARVISION® II

28164 CBK  **Same**, for use with HOPKINS® Telescope 30° 28162 BKA and KARL STORZ lens irrigation system CLEARVISION® II

28164 CFK  **Same**, for use with HOPKINS® Telescope 45° 28162 FKA and KARL STORZ lens irrigation system CLEARVISION® II

28164 CCK  **Same**, for use with HOPKINS® Telescope 70° 28162 CKA and KARL STORZ lens irrigation system CLEARVISION® II

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

28162 BVS  **Same**, for use with HOPKINS® Telescope 30° 28162 BVA and KARL STORZ lens irrigation system CLEARVISION® II

28162 FVS  **Same**, for use with HOPKINS® Telescope 45° 28162 FVA and KARL STORZ lens irrigation system CLEARVISION® II

28164 CBA  **Irrigation Sheath**, outer diameter 5 mm, working length 14 cm, for use with HOPKINS® Telescopes 7230 AA and 28132 AA and KARL STORZ lens irrigation systems CLEARVISION® and CLEARVISION® II

28164 CBB  **Same**, for use with HOPKINS® Telescopes 30° 7230 BA and 28132 BA and KARL STORZ lens irrigation systems CLEARVISION® and CLEARVISION® II

28164 CBF  **Same**, for use with HOPKINS® Telescopes 45° 7230 FA and 28132 FA/FVA and KARL STORZ lens irrigation systems CLEARVISION® and CLEARVISION® II
## Suction Tubes and Coagulation

The suction tubes with a special elongated or drop-shaped cut-off hole are designed for microsurgery in delicate areas. The special, slit-shaped cut-off hole makes it possible to regulate the suction power, which is especially important in sensitive regions.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>649179 A</td>
<td><strong>Suction Tube</strong>, malleable, with elongated cut-off hole and stylet, LUER, 4 Fr., working length 12 cm</td>
</tr>
<tr>
<td>649179 B</td>
<td>Same, working length 15 cm</td>
</tr>
<tr>
<td>649179 C</td>
<td>Same, working length 18 cm</td>
</tr>
<tr>
<td>649180 A</td>
<td><strong>Suction Tube</strong>, malleable, with elongated cut-off hole and stylet, LUER, 6 Fr., working length 12 cm</td>
</tr>
<tr>
<td>649180 B</td>
<td>Same, working length 15 cm</td>
</tr>
<tr>
<td>649180 C</td>
<td>Same, working length 18 cm</td>
</tr>
<tr>
<td>649182 A</td>
<td><strong>Suction Tube</strong>, malleable, with elongated cut-off hole and stylet, LUER, 8 Fr., working length 12 cm</td>
</tr>
<tr>
<td>649182 B</td>
<td>Same, working length 15 cm</td>
</tr>
<tr>
<td>649182 C</td>
<td>Same, working length 18 cm</td>
</tr>
<tr>
<td>649183 A</td>
<td><strong>Suction Tube</strong>, malleable, with elongated cut-off hole and stylet, LUER, 10 Fr., working length 12 cm</td>
</tr>
<tr>
<td>649183 B</td>
<td>Same, working length 15 cm</td>
</tr>
<tr>
<td>649183 C</td>
<td>Same, working length 18 cm</td>
</tr>
</tbody>
</table>
Suction Tubes and Coagulation

28164 XB  **Suction Tube**, with cut-off hole, drop-shaped, with distance markings, Luer, conical distal end, 6 Fr., working length 15 cm

28164 XA  **Same**, 8 Fr.

28164 XC  **Suction Tube**, with cut-off hole, drop-shaped, with distance markings, Luer, conical distal end, tip curved upwards, ball end, 2.4 mm, working length 15 cm

28164 XE  **Suction Tube**, with cut-off hole, drop-shaped, with distance markings, Luer, conical distal end, malleable, 6 Fr., working length 15 cm

28164 XD  **Same**, 8 Fr.
Suction Tubes and Coagulation

28164 MXA  **Suction and Coagulation Cannula**, insulated, curved 90°, outer diameter 2.5 mm, working length 16 cm

28164 MXB  **Same**, outer diameter 3 mm

28164 MXC  **Same**, outer diameter 3.6 mm

839330*  **BRINER Bipolar Suction Cannula**, angular, insulated, length of electrodes 3.5 mm, with cut-off hole, outer diameter 4.5 mm, working length 11 cm, for use with Bipolar High Frequency Cords 847000 or 847000 A/E/M/V

* Note: In the CE region, not for use in direct contact with the central nervous system
Suction Tubes and Coagulation

28164 BDN  **TAKE-APART® Bipolar Forceps**, rounded tip, width 2 mm, outer diameter 3.4 mm, working length 20 cm

28164 BDM  **Same**, with fine jaws, width 1 mm, distally angled 45°, horizontal closing

28164 BDD  **Same**, width 2 mm, distally angled 45°, horizontal closing

28164 BDK  **Same**, width 4 mm, distally angled 45°, horizontal closing

28164 BDL  **Same**, with fine jaws, width 1 mm, distally angled 45°, vertical closing

28164 BDG  **Same**, width 1.8 mm

28164 BGS  **Same**, with fine jaws, width 2 mm, distally angled 45°, size 3 mm, working length 10 cm
Suction Tubes and Coagulation

**28164 BPA**  *Bipolar Coagulation Forceps*, insulated, bayonet-shaped, blunt, tip 0.7 mm, working length 12 cm, total length 23 cm, for use with Bipolar High Frequency Cords 847000 or 847000 A/E/M/V

**28164 BPB**  *Same*, tip 0.7 mm, working length 14 cm, total length 25 cm

**28164 BPC**  *Same*, tip 0.3 mm, working length 12 cm, total length 23 cm

**844524**  *Bipolar Forceps*, bayonet-shaped, with bar, tip 0.7 mm, length 23 cm

**844525**  *Same*, angled

*Note: In the CE region, not for use in direct contact with the central nervous system*
Instruments

SEPEHRNIA Micro Instruments

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

28164 NBC  **Micro Needle Holder**, bayonet-shaped, jaws curved to left, 1 x 6 mm, working length 10 cm

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

28164 PBC  Same, serrated, 3 mm

28164 PBD  Same, jaws curved to left, 0.75 mm
Instruments
SEPEHRNIA Micro Instruments

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

28164 PBE  **Same**, 4 mm

28164 PBF  **Same**, 6 mm

28164 PBG  **Same**, spoon horizontal, 2 mm

28164 PBH  **Same**, spoon horizontal, 4 mm

28164 PBI  **Same**, spoon horizontal, 6 mm

28164 SBA  **Micro Scissors**, bayonet-shaped, sharp/sharp, cutting edges straight, working length 10 cm

28164 SBB  **Same**, cutting edges curved to left

28164 SBC  **Same**, blunt/blunt, cutting edges straight

28164 SBD  **Same**, cutting edges curved to right

28164 SBE  **Same**, cutting edges horizontal
Instruments

Wire Tray

A special wire tray is available for SEPEHRNIA micro instruments that allows cleaning and sterilization of up to six instruments in parallel.

39501 AN  Wire Tray for Cleaning, Sterilization and Storage of up to 6 SEPEHRNIA instruments with silicone holders and with direct connection to washer-disinfector via detachable Multiport Bridge 39100 VA, external dimensions (w x d x h): 480 x 125 x 54 mm
## Instruments

### KERRISON Bone Punches

![KERRISON Bone Punches](image)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>28164 MKA</td>
<td>KERRISON Bone Punch, detachable, rigid, upbiting 60° forward, size 1 mm, working length 17 cm</td>
</tr>
<tr>
<td>28164 MKB</td>
<td>Same, size 2 mm</td>
</tr>
<tr>
<td>28164 MKC</td>
<td>Same, size 3 mm</td>
</tr>
<tr>
<td>28164 MKK</td>
<td>Same, size 4 mm</td>
</tr>
<tr>
<td>28164 MKL</td>
<td>Same, size 5 mm</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>28164 MKD</td>
<td>KERRISON Bone Punch, detachable, rigid, downbiting 60° forward, size 1 mm, working length 17 cm</td>
</tr>
<tr>
<td>28164 MKE</td>
<td>Same, size 2 mm</td>
</tr>
<tr>
<td>28164 MKF</td>
<td>Same, size 3 mm</td>
</tr>
<tr>
<td>28164 MKO</td>
<td>Same, size 4 mm</td>
</tr>
</tbody>
</table>
Instruments

Micro Scissors

The delicate micro scissors, both straight and curved, allow precise and atraumatic dissection in narrow spaces.

- **662351** YASARGIL Micro Scissors, spring type, bayonet-shaped, scissor blades straight, length 20 cm
- **662355** Same, scissor blades curved downwards
- **662362** VANNAS Micro Scissors, spring type, bayonet-shaped, straight tips, length 20 cm
- **662365** Same, tips curved upwards
- **28164 MZB** Scissors, straight, with small handle, with cleaning connector, working length 18 cm
- **28164 MZC** Same, curved to right
- **28164 MZD** Same, curved to left
- **28164 MZE** Same, angled upwards
- **28164 SAD** Scissors, upturned 45°, delicate, sheath 360° rotatable, with cleaning connector, working length 18 cm
Instruments

Micro Forceps

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

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

28164 GBO  **Dissector**, bayonet-shaped, sharp, round spatula, tip angled upwards 45°, with round handle, size 3 mm, length 25 cm

28164 GBU  **Same**, tip angled downwards 45°

28164 GFO  **Dissector**, bayonet-shaped, sharp, flat long spatula, tip angled upwards 15°, with round handle, size 1.5 mm, length 25 cm

28164 GFU  **Same**, tip angled downwards 15°

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

28164 DR  **Same**, curved to right

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

28164 PUA  **Same**, curved downwards
Instruments

Micro Dissectors

28164 DKA  **Dissector**, tip angled 15°, width 1 mm, working length 10 cm

28164 DLA  *Same*, working length 13 cm

28164 DKB  **Dissector**, tip angled 45°, width 1 mm, working length 10 cm

28164 DLB  *Same*, working length 13 cm

28164 DKC  **Dissector**, tip angled 90°, width 1 mm, working length 10 cm

28164 DLC  *Same*, working length 13 cm

28164 DKD  **Dissector**, tip angled 15°, width 0.5 mm, working length 10 cm

28164 DLD  *Same*, working length 13 cm

28164 DKE  **Dissector**, tip angled 45°, width 0.5 mm, working length 10 cm

28164 DLE  *Same*, working length 13 cm

28164 DKF  **Dissector**, tip angled 90°, width 0.5 mm, working length 10 cm

28164 DLF  *Same*, working length 13 cm
Instruments
Round Knives

28164 TKA  Round Knife, straight, width 1 mm, working length 10 cm
28164 TLA  Same, working length 13 cm

28164 TKB  Round Knife, angled 45°, width 1 mm, working length 10 cm
28164 TLB  Same, working length 13 cm

28164 TKC  Round Knife, angled 90°, width 1 mm, working length 10 cm
28164 TLC  Same, working length 13 cm

28164 TKD  Round Knife, straight, size 2 mm, working length 10 cm
28164 TLD  Same, working length 13 cm

28164 TKE  Round Knife, angled 45°, size 2 mm, working length 10 cm
28164 TLE  Same, working length 13 cm

28164 TKF  Round Knife, angled 90°, size 2 mm, working length 10 cm
28164 TLF  Same, working length 13 cm
Instruments

Ring Curettes and Hooks

28164 GGO  **Ring Curette**, bayonet-shaped, round wire, inner diameter 5 mm, tip angled upwards 90°, with round handle, length 25 cm

28164 GGU  **Same**, angled downwards

28164 GKO  **Ring Curette**, bayonet-shaped, blunt, tip angled upwards 45°, outer diameter 4 mm, with round handle, length 25 cm

28164 GGU  **Same**, angled downwards

28164 HGA  **Micro Hook**, bayonet-shaped, blunt, working length 11.5 cm

28164 HGB  **Same**, working length 13.5 cm
Instruments

Spoon Curettes

28164 KKA  **Spoon Curette**, straight, size 1 mm, working length 10 cm
28164 KLA  **Same**, working length 13 cm

28164 KKB  **Spoon Curette**, angled 45°, size 1 mm, working length 10 cm
28164 KLB  **Same**, working length 13 cm

28164 KKC  **Spoon Curette**, angled 90°, size 1 mm, working length 10 cm
28164 KLC  **Same**, working length 13 cm

28164 KKD  **Spoon Curette**, straight, size 0.8 mm, working length 10 cm
28164 KLD  **Same**, working length 13 cm

28164 KKE  **Spoon Curette**, angled 45°, size 0.8 mm, working length 10 cm
28164 KLE  **Same**, working length 13 cm

28164 KKF  **Spoon Curette**, angled 90°, size 0.8 mm, working length 10 cm
28164 KLF  **Same**, working length 13 cm

28164 KKG  **Spoon Curette**, straight, size 2 mm, working length 10 cm
28164 KLG  **Same**, working length 13 cm

28164 KKH  **Spoon Curette**, angled 45°, size 2 mm, working length 10 cm
28164 KLH  **Same**, working length 13 cm

28164 KKI  **Spoon Curette**, angled 90°, size 2 mm, working length 10 cm
28164 KLI  **Same**, working length 13 cm
Holding Systems

Armrest

This armrest makes it easier to keep a steady hand, even during long surgeries. This can be used with KARL STORZ holding arms and is simply attached via the KSLOCK.

28272 AR  Armrest, with quick release coupling, rotating, for use with mechanical holding systems with KSLOCK

28272 HA  Articulated Stand, reinforced version, straight, with one mechanical central clamp for all five joint functions, height 30 cm, swivel range 37 cm, with quick release coupling KSLOCK (female)

28272 HB  Articulated Stand, reinforced version, L-shaped, with one central clamp for all five joint functions, height 48 cm, operating range 52 cm, with quick release coupling KSLOCK (female)
Holding Systems
Manual and Pneumatic Holding System

Mounting the telescope to a holding arm enables the surgeon to perform bimanual surgery.

**Holding System, autoclavable**, with quick release coupling KSLOCK including:
- **Rotation Socket**, to clamp to the OR table, for European and US standard rails, with lateral clamp for height and angle adjustment of the articulated stand
- **Articulated Stand**, reinforced version, L-shaped, with one central clamp for all five joint functions, height 48 cm, swivel range 52 cm, with quick release coupling KSLOCK (female)
- **Clamping Jaw**, metal, clamping range 4.8 up to 12.5 mm, with quick release coupling KSLOCK (male), for use with instrument and telescope sheaths

**POINT SETTER**, pneumatic holding arm, set, including:
- **POINT SETTER Arm**
- **OR Table Adaptor**
- **KSLOCK Adaptor**, for KARL STORZ clamping jaws
- **KARL STORZ Clamping Jaw**, large
- **KARL STORZ Clamping Jaw**, small
- **KARL STORZ Clamping Jaw**, for fiberscopes
- **Pressure Regulator**, 7 bar
- **Cover***, elasticated, 42 x 164 cm, package of 20

* © KARL STORZ 96022033 NEURO 32 3.0 03/2018/EW-E
VERSACRANE™

Holding system for the convenient positioning of the VITOM® system

28272 HSP  VERSACRANE™ Holding Arm, high, mobile, spring-supported, with quick release coupling KSLOCK, for use with KARL STORZ clamping jaws. The VERSACRANE™ holding arm is intended for use with VITOM® telescopes, including:
Mobile Stand, for VERSACRANE™ holding arm

WARNING: The VERSACRANE™ holding arm cannot be used with rigid endoscopes!

Clamping Jaws and Accessories

28272 VTK  VITOM® 3D Clamping Jaw, with ball joint and quick release coupling KSLOCK (male), for use with VITOM® 3D and KARL STORZ holding systems with quick release coupling KSLOCK

Clamping Jaws and Accessories for 2D VITOM®:

28272 UGK  Clamping Jaw, with ball joint, large, clamping range 16.5 to 23 mm, with quick release coupling KSLOCK (male), for use with all square-headed KARL STORZ HOPKINS® telescopes

28272 CN  Clamping Cylinder, folding, for flexible mounting of 10 mm telescopes to telescope sheath, autoclavable. The clamping cylinder allows vertical movement and rotation of the telescope.
Motor System

UNIDRIVE® S III NEURO SCB

**Specifications**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Touch screen</td>
<td>6.4”/300 cd/m²</td>
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<tr>
<td>Dimensions w x h x d</td>
<td>300 x 165 x 265 mm</td>
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<tr>
<td>Available languages</td>
<td>English, French, German, Spanish, Italian, Portuguese, Greek, Turkish, Polish, Russian</td>
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<tr>
<td>Weight</td>
<td>5.2 kg</td>
</tr>
<tr>
<td>Power supply</td>
<td>100-240 VAC, 50/60 Hz</td>
</tr>
<tr>
<td>Certifed to</td>
<td>IEC 601-1, CE acc. to MDD</td>
</tr>
</tbody>
</table>

40701701-1 UNIDRIVE® S III NEURO SCB, motor control unit with color display, touch screen, two motor outputs, integrated irrigation pump and integrated SCB module, power supply 100-240 VAC, 50/60 Hz
including:
- Mains Cord
- Irrigator Rod
- Two-Pedal Footswitch
- SCB Connecting Cable, length 100 cm
- Single Use Tubing Set*, sterile, package of 3

20712033 High-Speed Micro-Motor, max. speed 60,000 rpm, including connecting cable, for use with UNIDRIVE® S III ENT/NEURO

* All items on this page are not available for sale in the USA.
Recommended KARL STORZ Standard Set Configuration for Craniotomies

40701701-1 **UNIDRIVE® S III NEURO SCB**, motor control unit with color display, touch screen, two motor outputs, integrated irrigation pump and integrated SCB module, power supply 100-240 VAC, 50/60 Hz

20712033 **High-Speed Micro-Motor**, max. speed 60,000 rpm, including connecting cable

252645 **Craniotome Handpiece**, max. speed 60,000 rpm, including medium dura protector, for use with High-Speed Micro-Motor 20712033 as well as 3.17 mm craniotome burrs and suitable dura protector

252640 **Perforator Handpiece**, max. speed 1200 rpm, without perforator blade, Hudson connector, for use with High-Speed Micro-Motor 20712033

<table>
<thead>
<tr>
<th>Dura Protector, for use with Craniotome Handpiece 252645</th>
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<tbody>
<tr>
<td>pediatric</td>
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<td>252646</td>
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<table>
<thead>
<tr>
<th>High-Speed Craniotome Burr, shaft diameter 3.17 mm, sterile, for single use, package of 5, for use with 60,000 rpm craniotome handpiece</th>
</tr>
</thead>
<tbody>
<tr>
<td>pediatric</td>
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<tr>
<td>360000 S</td>
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<table>
<thead>
<tr>
<th>Single-Use Perforator Handpiece, with Hudson connector, sterile, for use with Perforator Handpiece 252640</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
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<td>252641</td>
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All items on this page are not available for sale in the USA.

**More information on handpieces and burrs is available in the Neurosurgery catalog.**
Recommended KARL STORZ Standard Set Configuration for Craniotomies

40701701-1  **UNIDRIVE® S III NEURO SCB**, motor control unit with color display, touch screen, two motor outputs, integrated irrigation pump and integrated SCB module, power supply 100-240 VAC, 50/60 Hz

20712033  **High-Speed Handpiece**, max. speed 60,000 rpm, including connecting cable

252690  **High-Speed Handpiece**, extra short, straight, short, angled

252691  **High-Speed Handpiece**, short, straight, 60,000 rpm

252680  **High-Speed Handpiece**, short, angled, 100,000 rpm

252681  **High-Speed Handpiece**, medium, angled, 100,000 rpm

252660  **High-Speed Handpiece**, extra short, angled, 60,000 rpm

252661  **High-Speed Handpiece**, short, angled, 60,000 rpm

<table>
<thead>
<tr>
<th>Diameter</th>
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<tr>
<td>7.5 mm</td>
<td>350675 S</td>
<td>350675 M</td>
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<tr>
<td>9 mm</td>
<td>350690 S</td>
<td>350690 M</td>
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**High-Speed Acorn**, sterile, for single use, package of 5, for use with 100,000 rpm High-Speed Handpiece

<table>
<thead>
<tr>
<th>Diameter</th>
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<th>medium</th>
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<tr>
<td>6 mm</td>
<td>350960 S</td>
<td>350960 M</td>
</tr>
<tr>
<td>9.1 mm</td>
<td>350991 S</td>
<td>350991 M</td>
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**High-Speed Barrel Burr**, sterile, for single use, package of 5, for use with 100,000 rpm High-Speed Handpiece

<table>
<thead>
<tr>
<th>Diameter</th>
<th>short</th>
<th>medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.8 mm</td>
<td>350718 S</td>
<td>350718 M</td>
</tr>
<tr>
<td>3 mm</td>
<td>350730 S</td>
<td>350730 M</td>
</tr>
</tbody>
</table>

**High-Speed Neuro Fluted Burr**, sterile, for single use, package of 5, for use with 100,000 rpm High-Speed Handpiece

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More information on handpieces and burrs is available in the Neurosurgery catalog.
It is recommended to check the suitability of the product for the intended procedure prior to use.