

# The LOTTA® System for Intracranial Neuroendoscopy

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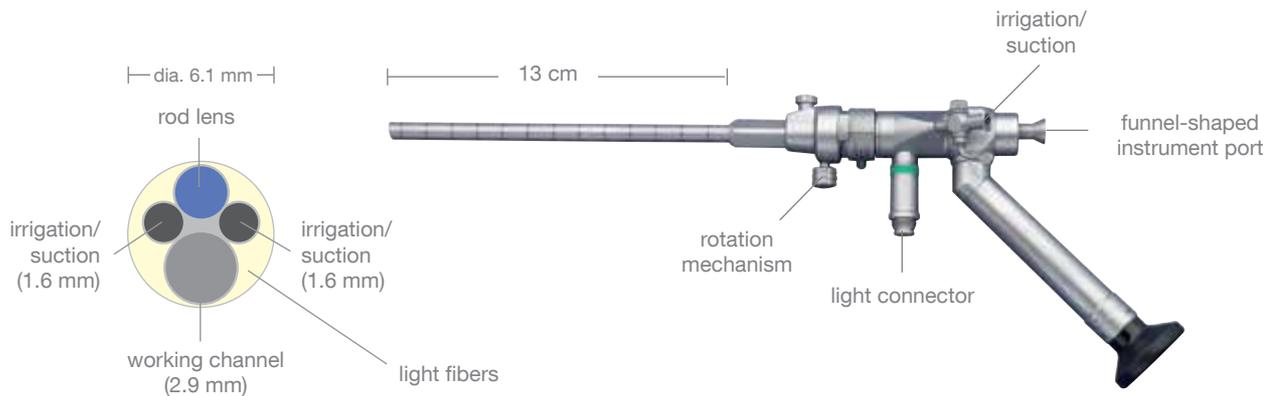


## The SCHROEDER LOTTA<sup>®</sup> System for Intracranial Neuroendoscopy

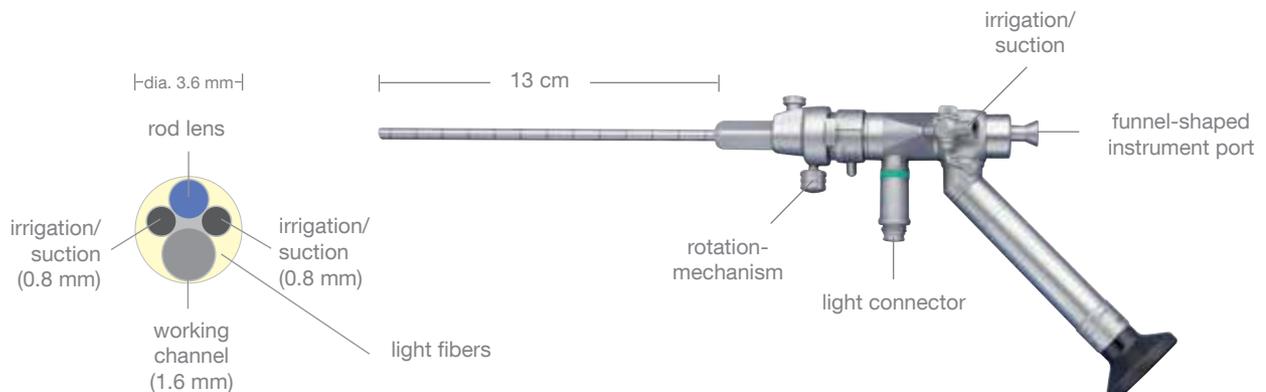
The LOTTA<sup>®</sup> system has been designed for performing the full range of endoscopic intracranial interventions in adults and children. The cornerstone of the system is based on the two ventriculoscopes Little LOTTA<sup>®</sup> and LOTTA<sup>®</sup>. These enable the treatment of all forms of obstructive hydrocephalus, intraventricular tumors and cysts as well as arachnoid and intraparenchymal cysts. An all-round solution, the LOTTA<sup>®</sup> system offers a free choice between the Little LOTTA<sup>®</sup> with its smaller diameter, more convenient handling and use in a wide range of applications such as ventriculostomies, septostomies, tumor biopsies and cyst fenestrations and the LOTTA<sup>®</sup> with its larger dimensions, which is not only suitable for the therapies mentioned above but is also particularly effective for the removal of colloid cysts, tumor resections, stent implantations as well as aqueductoplasties with subsequent stenting.

The somewhat larger diameter of the LOTTA<sup>®</sup> ventriculoscope allows the surgeon to perform bimanual dissection using two instruments. These can be used simultaneously in separate channels to enable more technically sophisticated procedures. Furthermore, the resection of larger tissue samples is possible, which benefits therapies such as tumor resection or cyst removal.

### LOTTA<sup>®</sup> (diameter with working sheath: 6.8 mm)



### Little LOTTA<sup>®</sup> (diameter with working sheath: 4.5 mm)



With a similar, yet more slender design, Little LOTTA® proves to be particularly valuable for treating patients with a narrow foramen of Monro. In ventriculostomies in both children and adults, the prepontine cistern can be reached directly through the ventriculostomas and, if necessary, the arachnoid membranes can be transected to establish the cerebrospinal fluid (CSF) flow. Although too slender for the simultaneous use of two instruments, Little LOTTA® offers the same range of functions as its larger counterpart. It is recommended to have a second ventriculoscope as a backup – if one is in use or in the process of sterilization or repair, the endoscopic workflow can be continued.

Both ventriculoscopes are equipped with a HOPKINS® wide-angle straightforward telescope with a high light-transmitting capacity which delivers unsurpassed image quality and safe orientation, even in protein-rich or bloody CSF fluid. The 6° telescope ensures optimal visual control of the instruments as they emerge from the working channel. The central working channel is flanked on both sides with two side channels with a smaller diameter. One is used for irrigation/suction and the other for the use of a second instrument. The irrigation function ensures that continuous cleaning is maintained in the area in front of the endoscope, even when visibility is hindered (cloudy CSF in the case of ventriculitis and/or ventricle bleeding). The drainage channel always remains open to prevent critical intracranial pressure increase caused by excessive irrigation. To facilitate insertion of the instruments into the working channel, a funnel-shaped enlargement has been integrated at the entrance to the working channel. Thanks to this stable construction, both ventriculoscopes are less susceptible to damage during cleaning, sterilization and storage.



**Simultaneous use of two instruments**



**Tip of the LOTTA® scope**



**Funnel-shaped entry of the working channel**



28164 LS



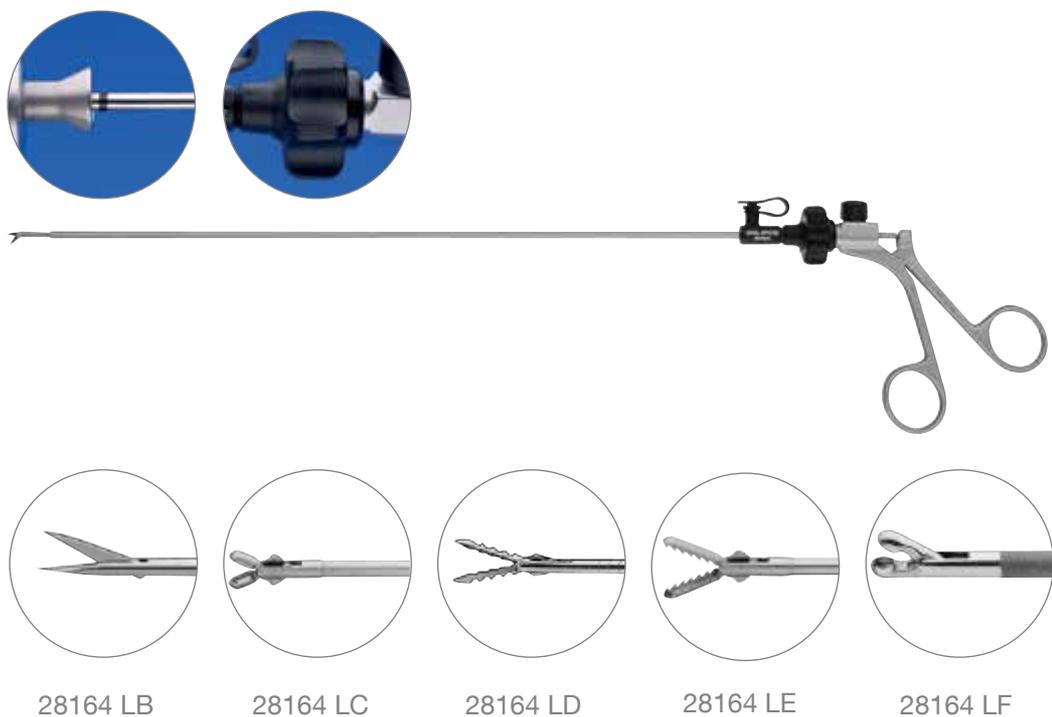
28164 LLS

Both Little LOTTA<sup>®</sup> and LOTTA<sup>®</sup> have operating sheaths featuring rotational stability so that they can be fixed to the holding arm to prevent the telescope from sliding down and/or undesired rotational movements where the angle ratios are unfavorable. However, the ventriculoscopes can still be rotated inside the sheath without having to alter the position on the holding arm – a considerable advantage for bimanual dissection. Furthermore, the operating sheaths can be taken apart for cleaning and sterilization. The LOTTA<sup>®</sup> system can, of course, be used “freehand”.



An obturator is inserted and locked into the working sheath before introduction. With its atraumatic distal tip, the obturator is required to facilitate introduction of the sheath into the ventricle or cysts. An optical obturator can also be used for this purpose, if necessary. A very slender HOPKINS® 0° telescope is introduced through the obturator in order to position the operating sheath under visual control.

The LOTTA® system is equipped with very stable instruments that can be used through the central working channel. A further feature is the marking on the upper part of the sheath which shows when the distal tip is emerging from the working channel. This minimizes the danger of unintentional and uncontrolled movements during instrument introduction. Furthermore, the jaws can be aligned by rotating the adjustment wheel, without having to rotate the entire instrument.



The instrument section of this brochure offers you a range of different sets containing all the instruments required for performing the most common endoscopic procedures such as, for example, ventriculostomies, aqueductoplasties, septostomies, foraminoplasties, tumor resections and cyst fenestrations. A full set configuration includes additional diagnostic telescopes with different angles of view that ensure better orientation in the ventricular system.

Customized sets can, of course, be arranged to suit individual requirements.

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## Documentation of Findings LOTTA® Neuroendoscope

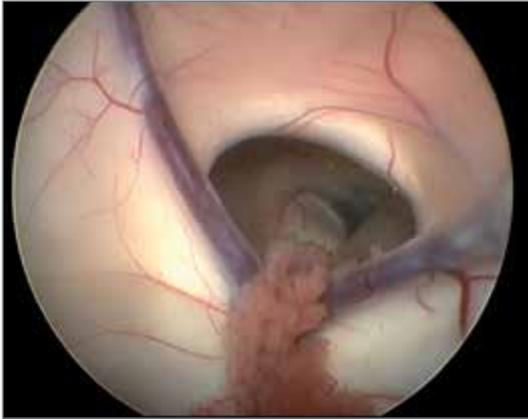


Fig. 7: Foramen of Monro

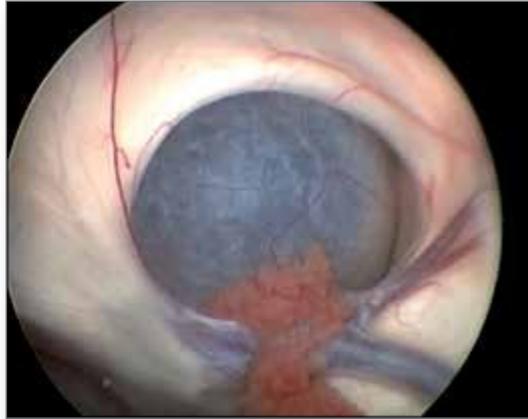


Fig. 8: Foramen of Monro with suprasellar arachnoid cyst



Fig. 9: Tumor in foramen of Monro



Fig. 10: Biopsy of a tumor in foramen of Monro



Fig. 11: Bimanual dissection by cutting into the membrane of a suprasellar arachnoid cyst with forceps and scissors



Fig. 12: Bimanual dissection using forceps and bipolar electrode



Fig. 13: Floor of the third ventricle



Fig. 14: Choroid plexus in the lateral ventricle

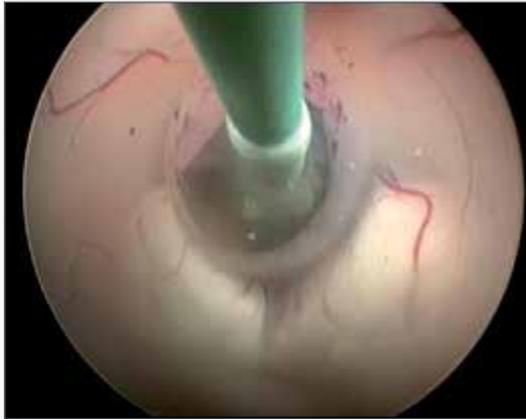


Fig. 15: Ventriculostomy with balloon catheter

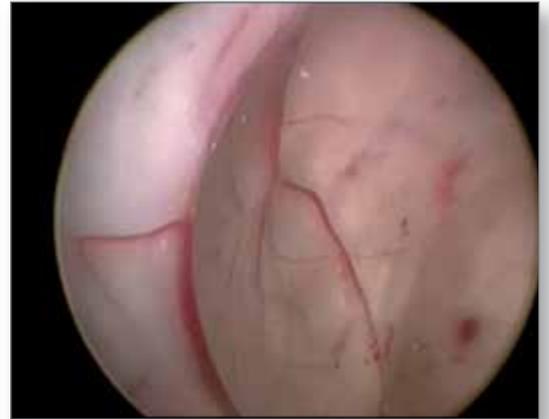


Fig. 16: Pellucid septum



Fig. 17: Colloid cyst



Fig. 18: Stent in the aqueduct

# LOTTA® Recommended Set



**Telescope and Sheath:**

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

**Instruments:**

- ⑤ 28164 LB **CLICKLINE Scissors**, pointed, single action jaws, diameter 2 mm, working length 30 cm
- ⑥ 28164 LC **CLICKLINE Biopsy Forceps**, double action jaws, diameter 2 mm, working length 30 cm
- ⑦ 28164 LD **CLICKLINE Ventriculostomy Forceps**, double action jaws, diameter 2 mm, working length 30 cm
- ⑧ 28164 LE **CLICKLINE Grasping Forceps**, double action jaws, diameter 2 mm, working length 30 cm
- ⑨ 28164 LF **CLICKLINE Biopsy Forceps**, single action jaws, diameter 2.7 mm, working length 30 cm
- ⑩ 28162 PK **Injection Cannula**, diameter 1.7 mm, working length 30 cm
- ⑪ 28762 KB **Bipolar Coagulation Electrode**, diameter 1.7 mm, working length 30 cm
- ⑫ 28160 ZJ **Biopsy Forceps**, flexible, double action jaws, diameter 1 mm, working length 30 cm
- ⑬ 28160 TV **Forceps**, for ventriculostomy, flexible, diameter 1 mm, working length 30 cm
- ⑭ 28164 BDV **TAKE-APART® Bipolar Forceps**, long, with flat jaws, outer diameter 2.4 mm, working length 30 cm
- ⑮ 28160 PD **Injection Needle**, flexible, for single use, diameter 2.5 mm, working length 45 cm

**Holding System:**

- ⑯ 28272 RKA **Holding System, autoclavable**, including:  
**Rotation Socket** to clamp on the operating table  
**Articulated Stand**, straight  
**Clamping Jaw**, metal, with axial intake

**Optional (not illustrated):**

- 28164 LP **Optical Obturator**, for positioning the Operating Sheath 28164 LS under visual control, for use with telescope HOPKINS® II 28008 AA
- 28008 AA **HOPKINS® II Straight Forward Telescope 0°**, enlarged view, diameter 2 mm, length 26 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green
- 28162 EM **Scissors**, pointed, slightly curved, double action jaws, diameter 1.7 mm, working length 30 cm
- 28162 FP **Scissors**, pointed, single action jaws, diameter 1.3 mm, length 30 cm
- 28164 LG **Guillotine Knife**, outer diameter 2.7 mm, working length 30 cm, including:  
**Handle**  
**Guillotine Knife Insert**

**For Diagnosis (not illustrated):**

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

**Recommended Sterilization Container:**

For telescope: 39314 G

For CLICKLINE instruments: 27717 D

**Please note:**

Additional use of a 1 mm Balloon Catheter 28162 GB is recommended.

# Little LOTTA<sup>®</sup> Recommended Set



**Telescope and Sheath:**

- ① 28164 LLA **Little LOTTA® Ventriculoscope with HOPKINS® Wide Angle Straight Forward Telescope 6°**, small, angled eyepiece, outer diameter 3.6 mm, length 18 cm, with working channel diameter 1.6 mm, irrigation/suction channel diameter 0.8 mm, **autoclavable**, with cleaning adaptor, fiber optic light transmission incorporated, color code: green, for use with small Operating Sheath 28164 LLS
- ② 28164 LLS **Operating Sheath**, small, outer diameter 4.5 mm, working length 13.3 cm, for use with Little LOTTA® Ventriculoscope 28164 LLA
- ③ 28164 LLO **Obturator**, for use with Operating Sheath 28164 LLS
- ④ 28164 LLP **Optical Obturator**, for use with Operating Sheath 28164 LLS and HOPKINS® II Telescope 28008 AA
- ⑤ 533 TVA **Adaptor, autoclavable**, permits telescope changing under sterile conditions
- ⑧ 28008 AA **HOPKINS® II Straight Forward Telescope 0°**, enlarged view, diameter 2 mm, length 26 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green

**Instruments:**

- ⑨ 28161 SC **Scissors**, single action jaws, diameter 1.3 mm, working length 30 cm
- ⑩ 28161 SB **Biopsy Forceps**, double action jaws, diameter 1.3 mm, working length 30 cm
- ⑪ 28161 SG **Grasping Forceps**, double action jaws, diameter 1.3 mm, working length 30 cm
- ⑫ 28161 SF **Bipolar Coagulation Electrode**, diameter 1.3 mm, working length 30 cm
- ⑬ 28161 SE **Coagulation Electrode**, unipolar, diameter 1.3 mm, working length 30 cm
- ⑭ 28160 TV **Forceps**, for ventriculostomy, flexible, double action jaws, diameter 1 mm, working length 30 cm
- ⑮ 28162 GB **Balloon Catheter**, volume 0.20 ml, diameter 1 mm, length 40 cm, sterile, for single use, package of 10

**Holding System:**

- ⑯ 28272 RKA **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, straight, with one mechanical central clamp for all five joint functions, height 30 cm, swivel range 37 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 Diagnosis:**

- ⑥ 28007 BA **HOPKINS® II Forward-Oblique Telescope 30°**, enlarged view, diameter 3.3 mm, length 25 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red
- ⑦ 28007 FA **HOPKINS® II Telescope 45°**, enlarged view, diameter 3.3 mm, length 25 cm, **autoclavable**, fiber optic light transmission incorporated, color code: black

## UNIDRIVE® S III NEURO



- 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**, two-stage, with proportional function  
**Silicone Tubing Set**, for irrigation, sterilizable  
**Clip Set**, for use with Tubing Set 20711640  
**SCB Connecting Cable**, length 100 cm  
\***Single Use Tubing Set**, sterile, package of 3

## High-Speed Micro-Motor



20712033

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

## Perforator



252640

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



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E-Mail: info@mtp-tut.de, www.mtp-tut.com

## Craniotome



252645

252645 **Craniotome Handpiece**, max. speed 60,000 rpm, including medium dura protector, for use with High-Speed Micro-Motor **20 7120 33** as well as 3.17 mm craniotome burrs and suitable dura protector



252646

**Pediatric Dura Protector**, for use with Craniotome Handpiece 252645

**The medium dura protector is automatically delivered with the craniotome handpiece.**



252647

**Medium Dura Protector**, for use with Craniotome Handpiece 252645



252648

**Large Dura Protector**, for use with Craniotome Handpiece 252645

	High-Speed Craniotome Burrs, 60,000 rpm., for single use, sterile, package of 5	
<b>pediatric</b>	<b>medium</b>	<b>long</b>
360000 S	360000 M	360000 L

## High-Speed Handpieces – 100,000 rpm

252680



**High-Speed Handpiece**, short, angled, 100,000 rpm, for use with High-Speed Micro-Motor **20 7120 33**

252681



**High-Speed Handpiece**, medium, angled, 100,000 rpm, for use with High-Speed Micro-Motor **20 7120 33**

252682



**High-Speed Handpiece**, long, angled, 100,000 rpm, for use with High-Speed Micro-Motor **20 7120 33**

# Burrs for High-Speed Handpieces

	short: 252680	medium: 252681	long: 252682
<b>Standard Burrs</b>			
1.0 mm	350110 S	350110 M	
2.0 mm	350120 S	350120 M	350120 L
3.0 mm	350130 S	350130 M	350130 L
4.0 mm	350140 S	350140 M	350140 L
5.0 mm	350150 S	350150 M	350150 L
6.0 mm	350160 S	350160 M	350160 L
7.0 mm	350170 S	350170 M	350170 L
<b>Diamond Burrs</b>			
0.6 mm			
1.0 mm	350210 S	350210 M	
1.5 mm			
2.0 mm	350220 S	350220 M	350220 L
3.0 mm	350230 S	350230 M	350230 L
4.0 mm	350240 S	350240 M	350240 L
5.0 mm	350250 S	350250 M	350250 L
6.0 mm	350260 S	350260 M	350260 L
7.0 mm	350270 S	350270 M	350270 L
<b>Diamond Burrs, coarse</b>			
2.0 mm			
3.0 mm	350330 S	350330 M	350330 L
4.0 mm	350340 S	350340 M	350340 L
5.0 mm	350350 S	350350 M	350350 L
6.0 mm	350360 S	350360 M	350360 L
7.0 mm	350370 S	350370 M	350370 L
<b>Acorn</b>			
7.5 mm	350675 S	350675 M	
9.5 mm	350690 S	350690 M	
<b>Barrel Burrs</b>			
6.0 mm	350960 S	350960 M	
9.1 mm	350991 S	350991 M	
<b>NEURO Fluted Burrs</b>			
1.8 mm	350718 S	350718 M	350718 L
3.0 mm	350730 S	350730 M	350730 L



All burrs sterile, for single use, package of 5

## Accessories



280053 **Universal Spray**, 6x 500 ml bottles  
– HAZARDOUS GOODS – UN 1950

including:  
Spray Nozzle



031131-10\* **Tubing Set**, for irrigation,  
for single use,  
sterile, package of 10



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E-Mail: info@mtp-tut.de, www.mtp-tut.com

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### Consent to receive electronic information

Yes, I agree to receive future information by email at the following address:

Email

Name

Department / Practice

Street address

ZIP, Town

Signature

I agree to my data being stored at KARL STORZ for this purpose. I can withdraw my consent at any time and without giving reasons by emailing KARL STORZ at info@karlstorz.com. KARL STORZ will not make these data available to third parties.

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ENDOWORLD®

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