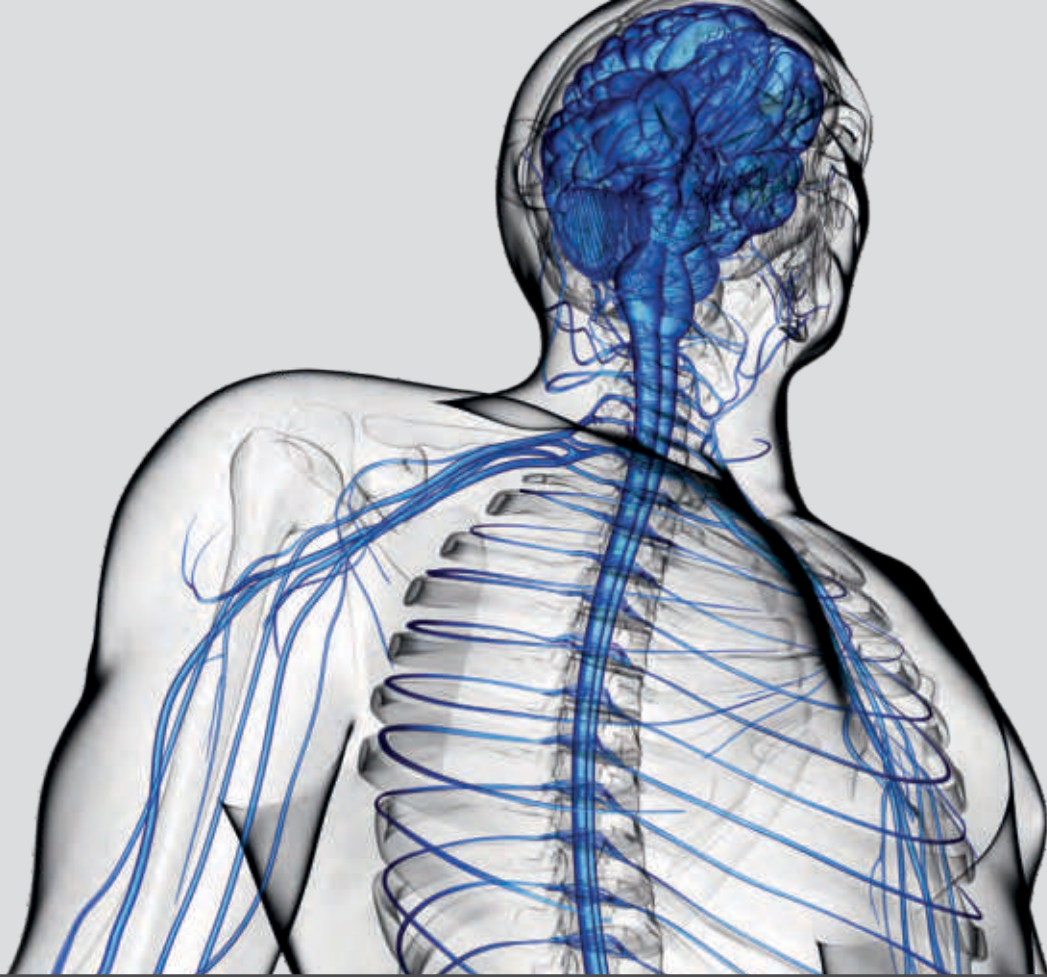




ZUOL
INSTRUMENTS

Neuro and
Spine Surgery



ZUOL
INSTRUMENTS





1. Rongeurs

5



2. Retractors

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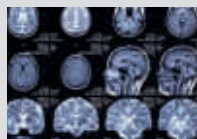
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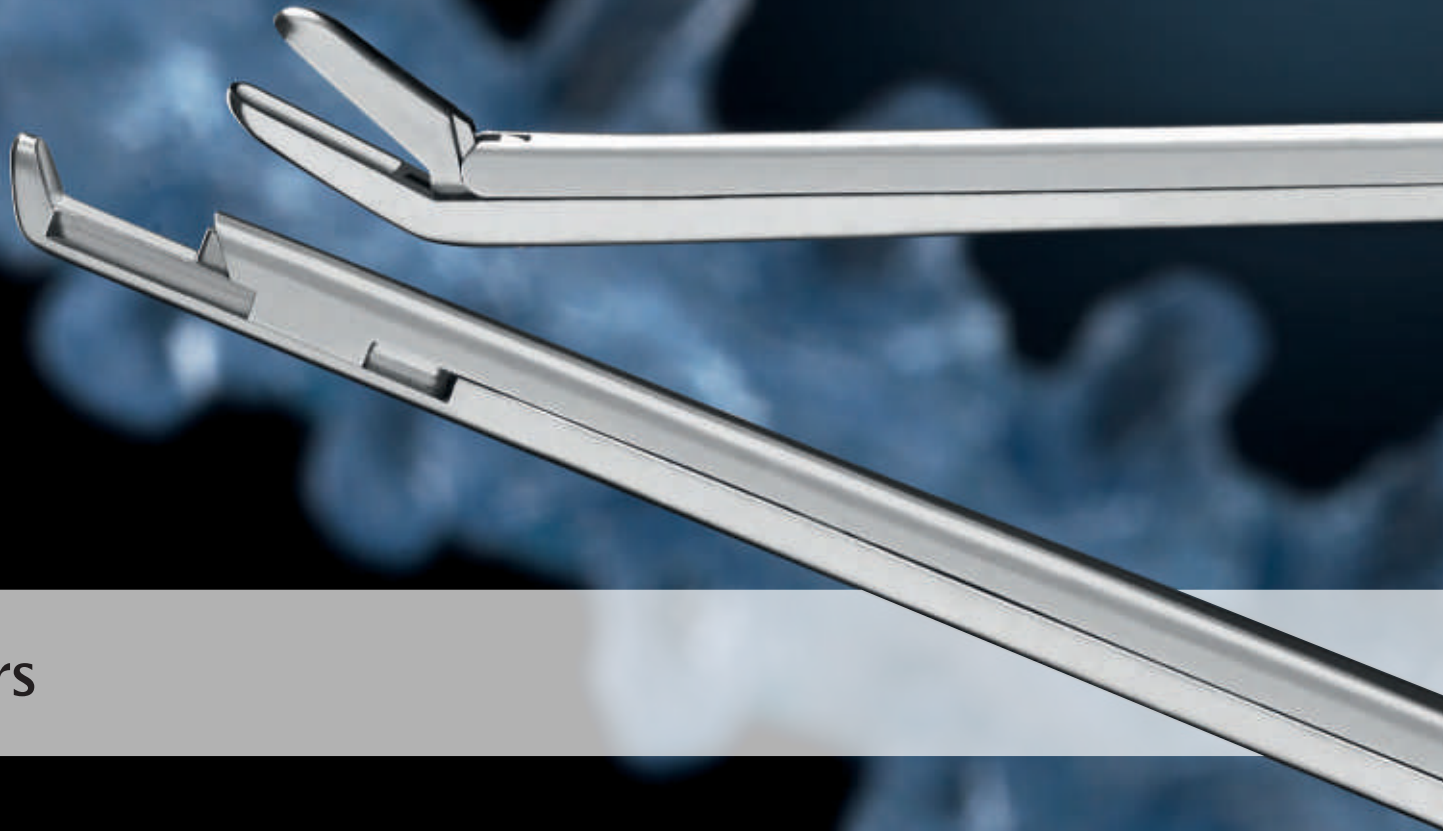
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Rongeurs



An efficient cleaning concept!

Our new detachable Spinal IVD and Laminectomy Rongeurs meet the highest standard hygiene requirements for avoiding surgical site infections. While multiple-component instruments are usually difficult to process, our detachable rongeurs ensure easy handling, efficient cleaning and effective sterilization.

The particular advantages are:

- excellent cutting properties
- lasting durability
- easy bone removal
- safe and easy detaching
- efficient cleaning and sterilization of the total instrument
- all parts stay together and thus cannot get lost
- easy and quick assembly

Minimally invasive spinal approaches have advanced considerably over the past decade, anticipating that patients will experience reduced postoperative pain, improved physiologic muscle function, and more acceptable cosmetic results. Whether a true percutaneous approach, through a tubular dilator retractor approach, or a muscle splitting approach is the method of choice, our special bayonet-shaped rongeurs with slim shafts will provide the surgeon with the visibility, the deep reach and the preferential instrument maneuverability required.



Geister Spinal

IVD Rongeurs



Newly developed Geister Spinal IVD Rongeurs designed for easy detaching at the push of the gold button.

- the gold button indicates the detachability
- jaws are available in 2, 3 and 4 mm widths
- extremely firm construction of jaw
- shafts available in various lengths, straight, bayonet up, left or right designs
- working ends straight, 45° upwards or 45° downwards biting
- easy and safe detaching at the push of the gold button
- efficient cleaning and sterilization of the total instrument
- all parts stay together and thus cannot get lost



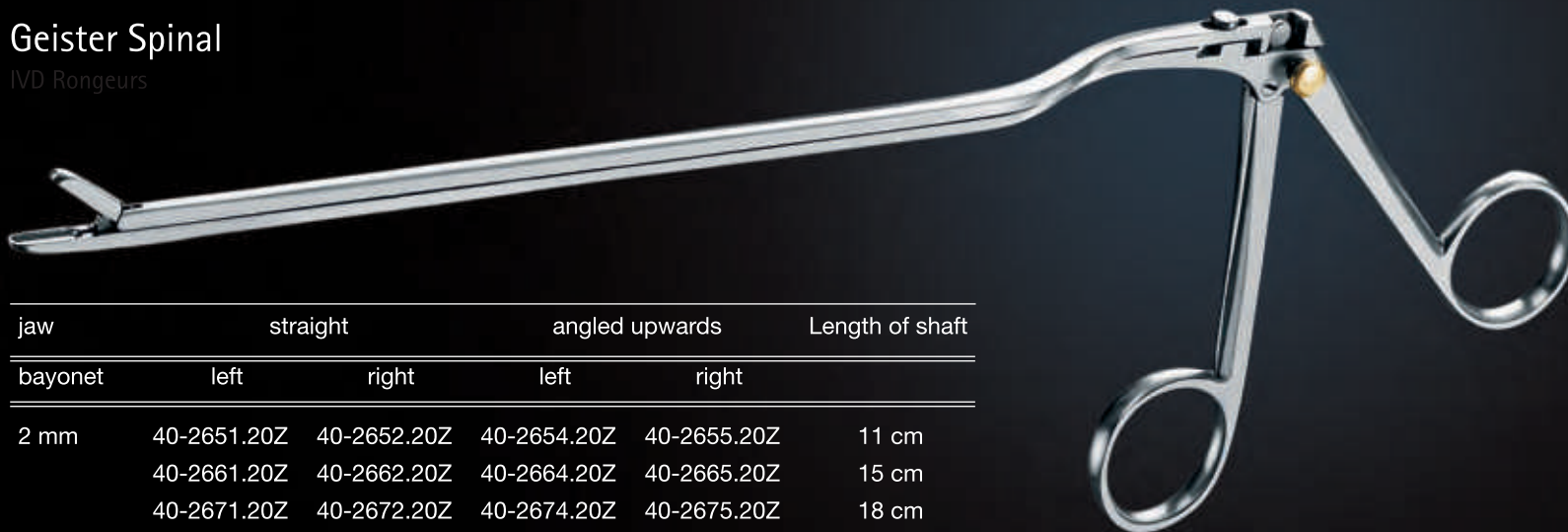

Geister Spinal IVD Rongeurs, detachable

jaw	straight	upwards	downwards	Length of shaft
2 mm	40-2620.16Z	40-2621.16Z	40-2622.16Z	15.5 cm
	40-2620.18Z	40-2621.18Z	40-2622.18Z	18.0 cm
3 mm	40-2625.16Z	40-2626.16Z	40-2627.16Z	15.5 cm
	40-2625.18Z	40-2626.18Z	40-2627.18Z	18.0 cm
4 mm	40-2630.16Z	40-2631.16Z	40-2632.16Z	15.5 cm
	40-2630.18Z	40-2631.18Z	40-2632.18Z	18.0 cm

K add „K“ behind catalog reference if desired with black ceramic coating

Geister Spinal

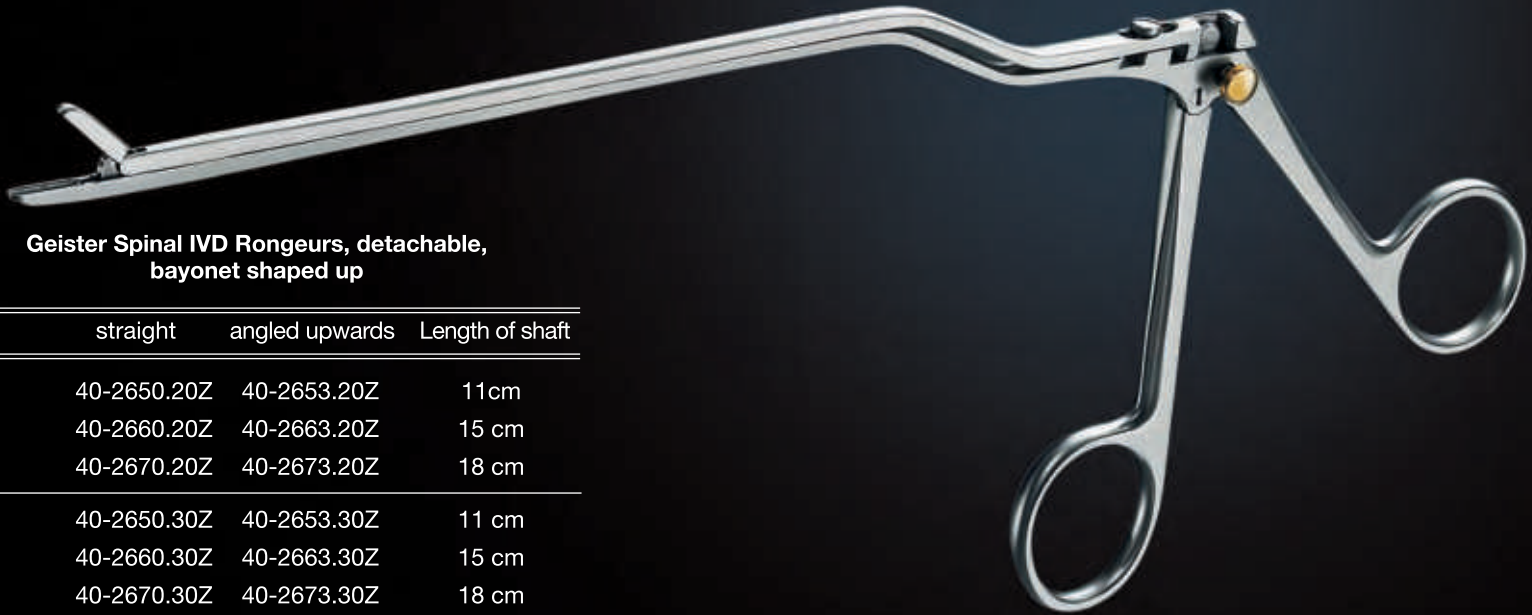
IVD Rongeurs



jaw	straight		angled upwards		Length of shaft
bayonet	left	right	left	right	
2 mm	40-2651.20Z	40-2652.20Z	40-2654.20Z	40-2655.20Z	11 cm
	40-2661.20Z	40-2662.20Z	40-2664.20Z	40-2665.20Z	15 cm
	40-2671.20Z	40-2672.20Z	40-2674.20Z	40-2675.20Z	18 cm
3 mm	40-2651.30Z	40-2652.30Z	40-2654.30Z	40-2655.30Z	11 cm
	40-2661.30Z	40-2662.30Z	40-2664.30Z	40-2665.30Z	15 cm
	40-2671.30Z	40-2672.30Z	40-2674.30Z	40-2675.30Z	18 cm
4 mm	40-2651.40Z	40-2652.40Z	40-2654.40Z	40-2655.40Z	11 cm
	40-2661.40Z	40-2662.40Z	40-2664.40Z	40-2665.40Z	15 cm
	40-2671.40Z	40-2672.40Z	40-2674.40Z	40-2675.40Z	18 cm
5 mm	40-2651.50Z	40-2652.50Z	40-2654.50Z	40-2655.50Z	11 cm
	40-2661.50Z	40-2662.50Z	40-2664.50Z	40-2665.50Z	15 cm
	40-2671.50Z	40-2672.50Z	40-2674.50Z	40-2675.50Z	18 cm



add „K“ behind catalog reference if desired with black ceramic coating



**Geister Spinal IVD Rongeurs, detachable,
bayonet shaped up**

jaw	straight	angled upwards	Length of shaft
2 mm	40-2650.20Z	40-2653.20Z	11cm
	40-2660.20Z	40-2663.20Z	15 cm
	40-2670.20Z	40-2673.20Z	18 cm
3 mm	40-2650.30Z	40-2653.30Z	11 cm
	40-2660.30Z	40-2663.30Z	15 cm
	40-2670.30Z	40-2673.30Z	18 cm
4 mm	40-2650.40Z	40-2653.40Z	11 cm
	40-2660.40Z	40-2663.40Z	15 cm
	40-2670.40Z	40-2673.40Z	18 cm
5 mm	40-2650.50Z	40-2653.50Z	11 cm
	40-2660.50Z	40-2663.50Z	15 cm
	40-2670.50Z	40-2673.50Z	18 cm

Wagner

detachable

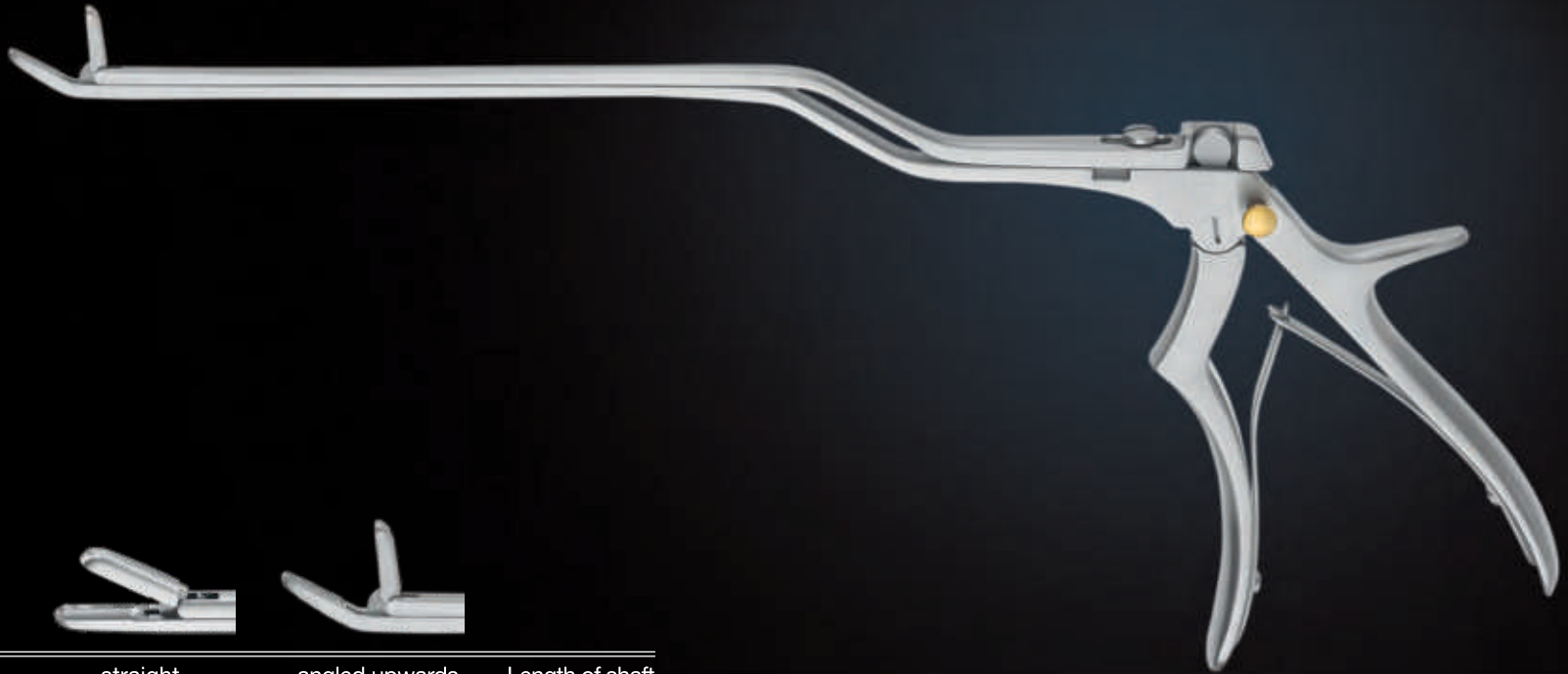


jaw	straight	Length of shaft
3 mm	40-2370.03	20 cm
	40-2372.03	30 cm
4 mm	40-2370.04	20 cm
	40-2372.04	30 cm
5 mm	40-2370.05	20 cm
	40-2372.05	30 cm
6 mm	40-2370.06	20 cm
	40-2372.06	30 cm

K add „K“ behind catalog reference if desired with black ceramic coating

Wagner

Geister Wagner Rongeurs, detachable, bayonet shaped up



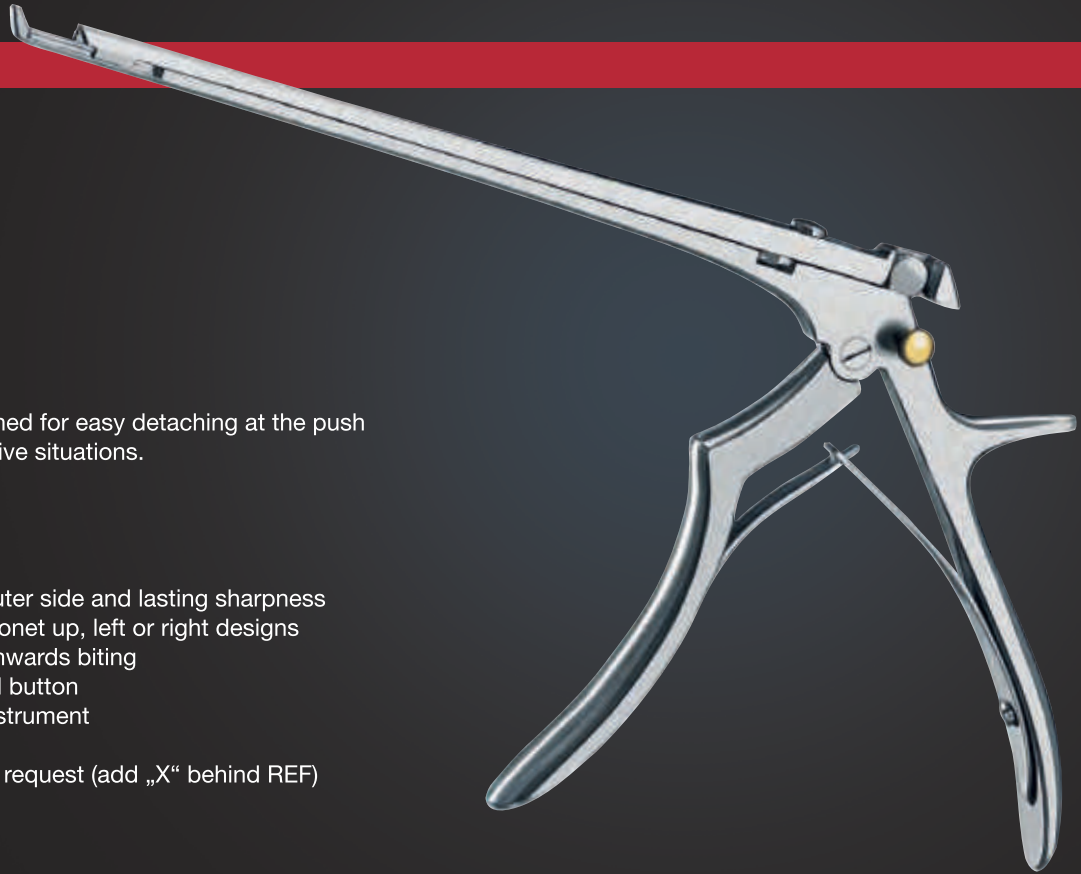
jaw	straight	angled upwards	Length of shaft
3 mm	40-2376.03	40-2377.03	15 cm
4 mm	40-2376.04	40-2377.04	15 cm
5 mm	40-2376.05	40-2377.05	15 cm

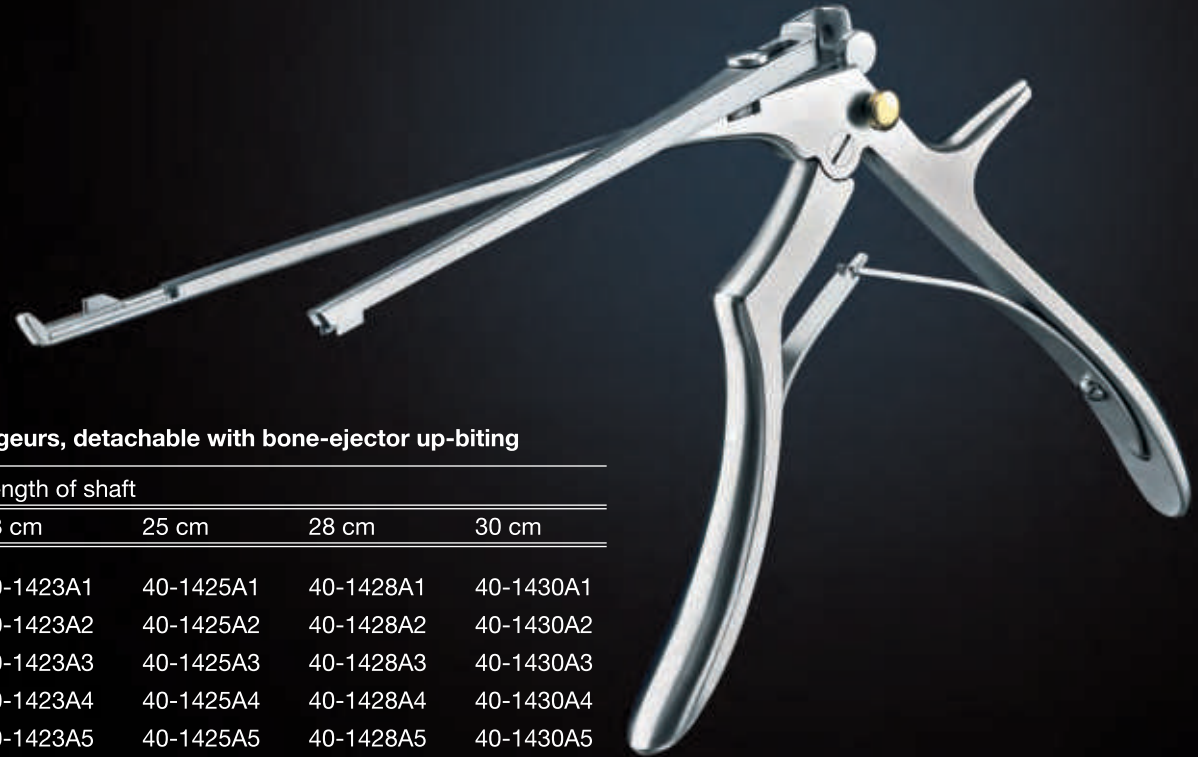
K add „K“ behind catalog reference if desired with black ceramic coating

Geister-Kerrison

Newly developed Geister-Kerrison Rongeurs designed for easy detaching at the push of the gold button and perfect function in all operative situations.

- the gold button indicates the detachability
- jaws are available in 1-5 mm widths
- ejector for easy bone removal
- strongly constructed jaws with guides on the outer side and lasting sharpness
- shafts available in various lengths, straight, bayonet up, left or right designs
- working ends 40° and 90° upwards or 40° downwards biting
- easy and safe detaching at the push of the gold button
- efficient cleaning and sterilization of the total instrument
- all parts stay together and thus cannot get lost
- extra thin footplate for cervical use available on request (add „X“ behind REF)




Geister-Kerrison Laminectomy Rongeurs, detachable with bone-ejector up-biting

jaw	Length of shaft					
	18 cm	20 cm	23 cm	25 cm	28 cm	30 cm
1 mm 90°	40-1418A1	40-1420A1	40-1423A1	40-1425A1	40-1428A1	40-1430A1
2 mm 90°	40-1418A2	40-1420A2	40-1423A2	40-1425A2	40-1428A2	40-1430A2
3 mm 90°	40-1418A3	40-1420A3	40-1423A3	40-1425A3	40-1428A3	40-1430A3
4 mm 90°	40-1418A4	40-1420A4	40-1423A4	40-1425A4	40-1428A4	40-1430A4
5 mm 90°	40-1418A5	40-1420A5	40-1423A5	40-1425A5	40-1428A5	40-1430A5
1 mm 40°	40-1418C1	40-1420C1	40-1423C1	40-1425C1	40-1428C1	40-1430C1
2 mm 40°	40-1418C2	40-1420C2	40-1423C2	40-1425C2	40-1428C2	40-1430C2
3 mm 40°	40-1418C3	40-1420C3	40-1423C3	40-1425C3	40-1428C3	40-1430C3
4 mm 40°	40-1418C4	40-1420C4	40-1423C4	40-1425C4	40-1428C4	40-1430C4
5 mm 40°	40-1418C5	40-1420C5	40-1423C5	40-1425C5	40-1428C5	40-1430C5

Geister-Kerrison

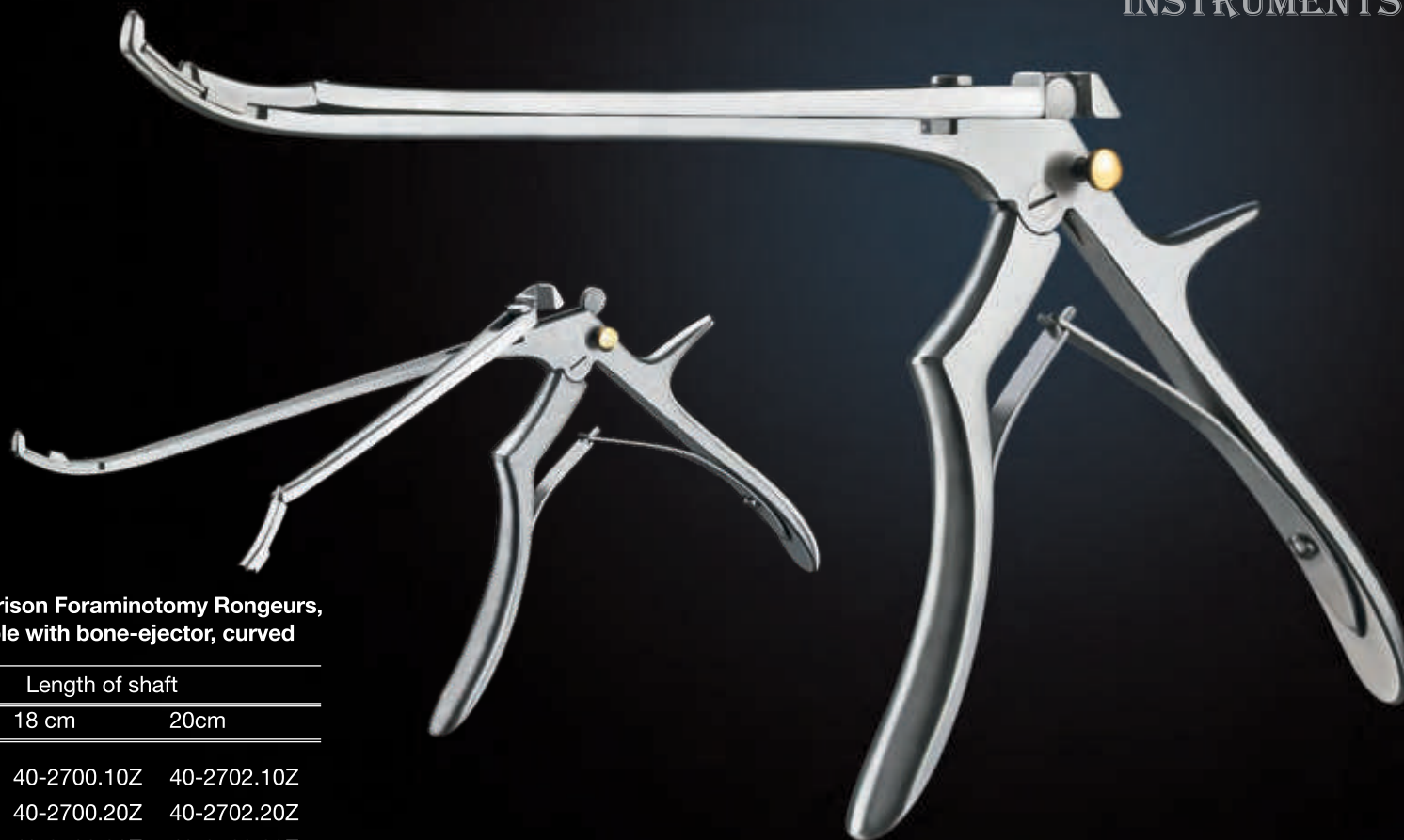
Laminectomy Rongeurs



Geister-Kerrison Laminectomy Rongeurs, detachable with bone-ejector down-biting

jaw	Length of shaft					
	18 cm	20 cm	23 cm	25 cm	28 cm	30 cm
1 mm 40°	40-1418D1	40-1420D1	40-1423D1	40-1425D1	40-1428D1	40-1430D1
2 mm 40°	40-1418D2	40-1420D2	40-1423D2	40-1425D2	40-1428D2	40-1430D2
3 mm 40°	40-1418D3	40-1420D3	40-1423D3	40-1425D3	40-1428D3	40-1430D3
4 mm 40°	40-1418D4	40-1420D4	40-1423D4	40-1425D4	40-1428D4	40-1430D4
5 mm 40°	40-1418D5	40-1420D5	40-1423D5	40-1425D5	40-1428D5	40-1430D5

Geister-Kerrison Foraminotomy Rongeurs



**Geister-Kerrison Foraminotomy Rongeurs,
detachable with bone-ejector, curved**

jaw	Length of shaft	
	18 cm	20cm
1 mm 40°	40-2700.10Z	40-2702.10Z
2 mm 40°	40-2700.20Z	40-2702.20Z
3 mm 40°	40-2700.30Z	40-2702.30Z
4 mm 40°	40-2700.40Z	40-2702.40Z
5 mm 40°	40-2700.50Z	40-2702.50Z

K add „K“ behind catalog reference if desired with black ceramic coating

Geister-Kerrison

Laminectomy Rongeurs



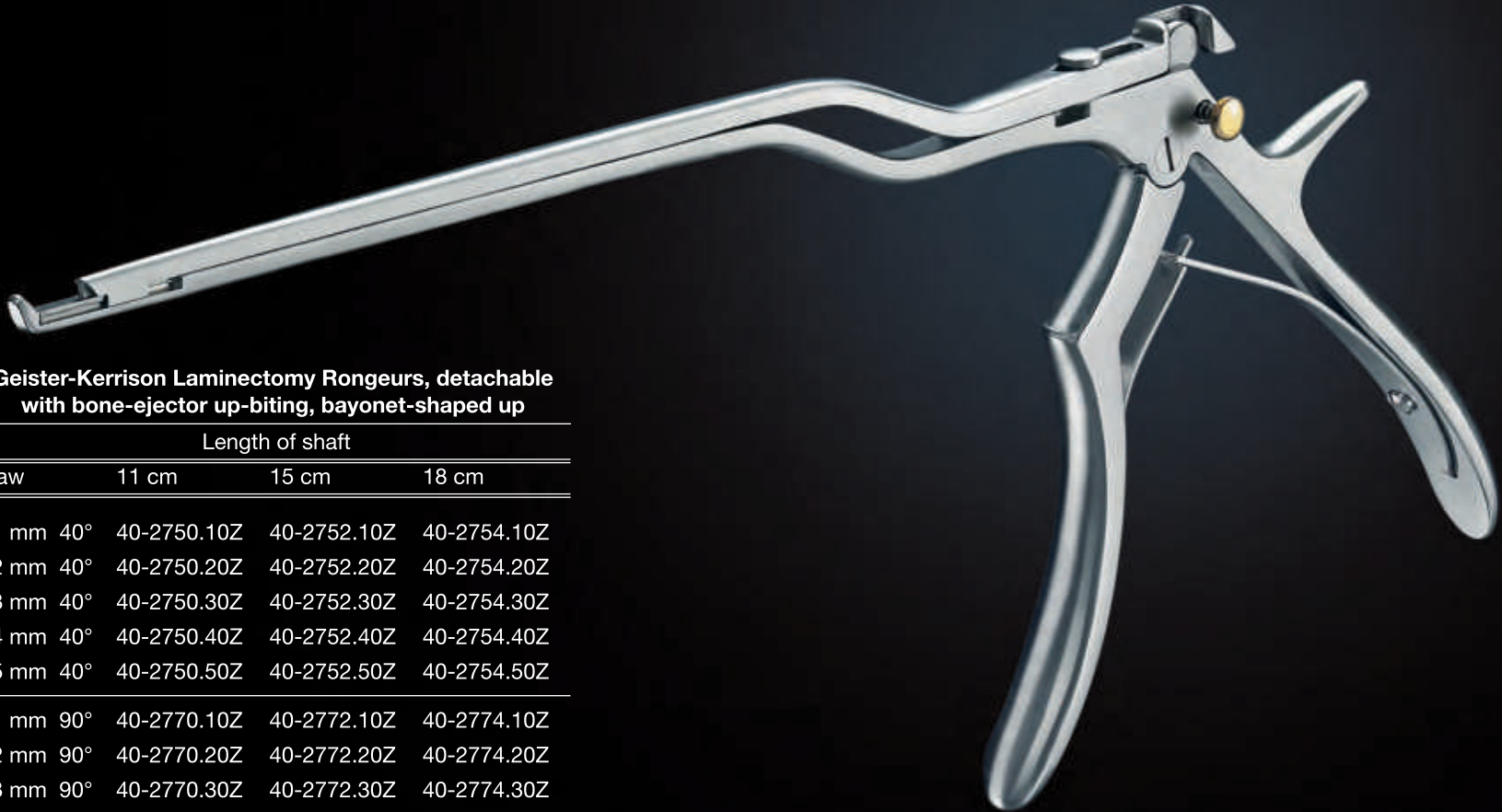
Geister-Kerrison Laminectomy Rongeurs, detachable with bone-ejector up-biting, bayonet-shaped left and right

Length of shaft

jaw	left			right		
	11 cm	15 cm	18 cm	11 cm	15 cm	18 cm
1 mm 40°	40-2710.10Z	40-2712.10Z	40-2714.10Z	40-2720.10Z	40-2722.10Z	40-2724.10Z
2 mm 40°	40-2710.20Z	40-2712.20Z	40-2714.20Z	40-2720.20Z	40-2722.20Z	40-2724.20Z
3 mm 40°	40-2710.30Z	40-2712.30Z	40-2714.30Z	40-2720.30Z	40-2722.30Z	40-2724.30Z
4 mm 40°	40-2710.40Z	40-2712.40Z	40-2714.40Z	40-2720.40Z	40-2722.40Z	40-2724.40Z
5 mm 40°	40-2710.50Z	40-2712.50Z	40-2714.50Z	40-2720.50Z	40-2722.50Z	40-2724.50Z
1 mm 90°	40-2730.10Z	40-2732.10Z	40-2734.10Z	40-2740.10Z	40-2742.10Z	40-2744.10Z
2 mm 90°	40-2730.20Z	40-2732.20Z	40-2734.20Z	40-2740.20Z	40-2742.20Z	40-2744.20Z
3 mm 90°	40-2730.30Z	40-2732.30Z	40-2734.30Z	40-2740.30Z	40-2742.30Z	40-2744.30Z
4 mm 90°	40-2730.40Z	40-2732.40Z	40-2734.40Z	40-2740.40Z	40-2742.40Z	40-2744.40Z
5 mm 90°	40-2730.50Z	40-2732.50Z	40-2734.50Z	40-2740.50Z	40-2742.50Z	40-2744.50Z



add „K“ behind catalog reference if desired with black ceramic coating



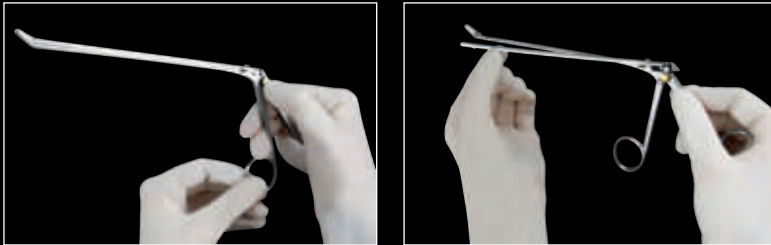
Geister-Kerrison Laminectomy Rongeurs, detachable with bone-ejector up-biting, bayonet-shaped up

		Length of shaft		
jaw		11 cm	15 cm	18 cm
1 mm	40°	40-2750.10Z	40-2752.10Z	40-2754.10Z
2 mm	40°	40-2750.20Z	40-2752.20Z	40-2754.20Z
3 mm	40°	40-2750.30Z	40-2752.30Z	40-2754.30Z
4 mm	40°	40-2750.40Z	40-2752.40Z	40-2754.40Z
5 mm	40°	40-2750.50Z	40-2752.50Z	40-2754.50Z
1 mm	90°	40-2770.10Z	40-2772.10Z	40-2774.10Z
2 mm	90°	40-2770.20Z	40-2772.20Z	40-2774.20Z
3 mm	90°	40-2770.30Z	40-2772.30Z	40-2774.30Z
4 mm	90°	40-2770.40Z	40-2772.40Z	40-2774.40Z
5 mm	90°	40-2770.50Z	40-2772.50Z	40-2774.50Z

Disassembly Instructions

- Close the handle.
- Push the gold button and keep it pushed.
- Open the handle.
- The upper movable shaft is unlocked and can be slit to the left by a slide move upwards.

Advice: If the handle is closed again, the shaft remains swivelled out so that the instrument can be sterilised in open position.



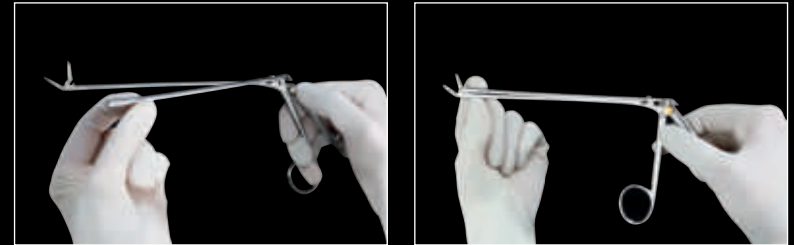
Demontage

- Griff schließen.
- Goldenen Knopf drücken und gedrückt halten.
- Griff wieder öffnen.
- Das obere Schiebeteil ist entriegelt und kann nach oben abgehoben und nach links ausgeschwenkt werden.

Hinweis: Durch nochmaliges Schließen des Griffes bleibt der Schaft ausgeschwenkt und das Instrument kann in offenem Zustand sterilisiert werden.

Assembly Instructions

- Put back the upper jaw to an open position.
- Close the handle, push the gold button and keep it pushed.
- Open the handle and slide back the movable shaft on the instrument.
- Put the movable shaft in the groove of the jaw and push the shaft downwards.
- Close the handle and the instrument is locked.



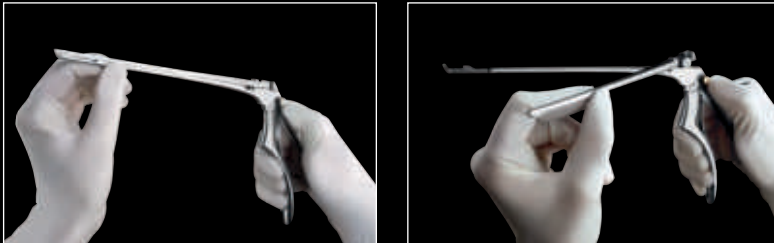
Montage

- Maul zurückstellen in offene Position.
- Griff schließen. Goldenen Knopf drücken und gedrückt halten.
- Griff öffnen und Schieber einschwenken.
- Schieber in die Maulkerbe einfädeln und Schieber nach unten drücken.
- Griff schließen – das Instrument ist verriegelt.

Disassembly Instructions

- Close the handle.
- Push the gold button and keep it pushed.
- Open the handle.
- The upper movable shaft is unlocked and can be slit to the left by a slide move upwards.

Advice: If the handle is closed again, the shaft remains swivelled out so that the instrument can be sterilised in open position.



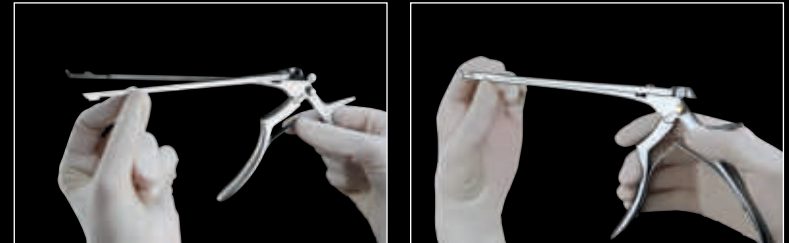
Demontage

- Griff schließen.
- Goldenen Knopf drücken und gedrückt halten.
- Griff wieder öffnen.
- Das obere Schiebeteil ist entriegelt und kann nach oben abgehoben und nach links ausgeschwenkt werden.

Hinweis: Durch nochmaliges Schließen des Griffes bleibt der Schaft ausgeschwenkt und das Instrument kann in offenem Zustand sterilisiert werden.

Assembly Instructions

- Close the handle.
- Push the gold button and keep it pushed.
- Open the handle and slide back the movable shaft on the instrument.
- Put the movable shaft in the lower guide in front and push the shaft downwards.
- Close the handle and the instrument is locked.



Montage

- Griff schließen.
- Goldenen Knopf drücken und gedrückt halten.
- Griff öffnen und Schieber einschwenken.
- Schieber in die untere Führung einsetzen und Schieber nach unten drücken.
- Griff schließen – das Instrument ist verriegelt.

Hygienic Lumbar and Cervical Kerrison Laminectomy Rongeurs



- Unique function and reliable design
- Detachable for improved cleaning capability and maximum hygiene and safety
- Avoids undesired trapping of tissue and debris
- All parts stay connected even when detached
- Large plastic trigger ensures that rongeur will not disengage during use and that gloves do not get caught in the trigger mechanism

- Ergonomic handle provides maximum comfort and control, and helps to reduce fatigue
- Available in varying lengths and bite sizes
- On request lumbar versions available with integrated bone ejector for immediate bone removal (order code „E“)
- Optionally with a black ceramic coating for a reduced friction and no glare



Model (stainless satin)		Lumbar (regular footplate)		Cervical (thin footplate)	
Working Length	Width	90° up	40° up	90° up	40° up
180 mm	1 mm	40-1218A1	40-1218C1	40-1318A1	40-1318C1
	2 mm	40-1218A2	40-1218C2*	40-1318A2	40-1318C2
	3 mm	40-1218A3	40-1218C3*	40-1318A3	40-1318C3
	4 mm	40-1218A4	40-1218C4*	40-1318A4	40-1318C4
	5 mm	40-1218A5	40-1218C5*	40-1318A5	40-1318C5
	6 mm	40-1218A6	40-1218C6*	40-1318A6	40-1318C6
200 mm	1 mm	40-1220A1	40-1220C1	40-1320A1	40-1320C1
	2 mm	40-1220A2	40-1220C2*	40-1320A2	40-1320C2
	3 mm	40-1220A3	40-1220C3*	40-1320A3	40-1320C3
	4 mm	40-1220A4	40-1220C4*	40-1320A4	40-1320C4
	5 mm	40-1220A5	40-1220C5*	40-1320A5	40-1320C5
	6 mm	40-1220A6	40-1220C6*	40-1320A6	40-1320C6
230 mm	1 mm	40-1223A1	40-1223C1	40-1323A1	40-1323C1
	2 mm	40-1223A2	40-1223C2*	40-1323A2	40-1323C2
	3 mm	40-1223A3	40-1223C3*	40-1323A3	40-1323C3
	4 mm	40-1223A4	40-1223C4*	40-1323A4	40-1323C4
	5 mm	40-1223A5	40-1223C5*	40-1323A5	40-1323C5
	6 mm	40-1223A6	40-1223C6*	40-1323A6	40-1323C6

*add „E“ behind catalog reference if desired with EJECTOR for immediate bone removal

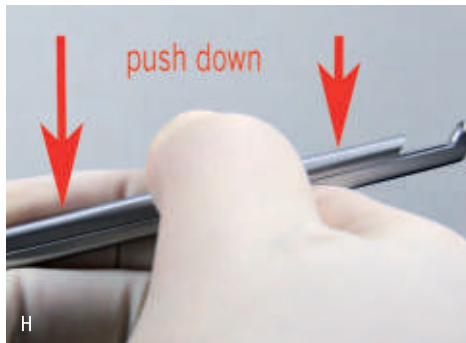
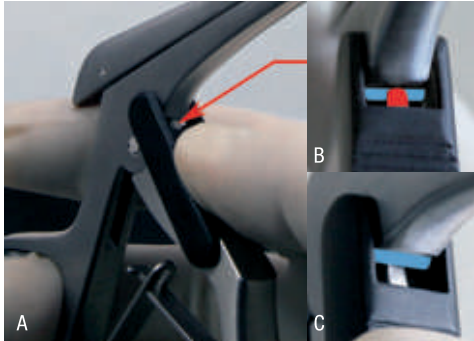
Hygienic Lumbar and Cervical Kerrison Laminectomy Rongeurs

K black ceramic coating



Model (black ceramic)		Lumbar (regular footplate)		Cervical (thin footplate)	
Working Length	Width	90° up	40° up	90° up	40° up
180 mm	1 mm	40-1218A1K	40-1218C1K	40-1318A1K	40-1318C1K
	2 mm	40-1218A2K	40-1218C2K*	40-1318A2K	40-1318C2K
	3 mm	40-1218A3K	40-1218C3K*	40-1318A3K	40-1318C3K
	4 mm	40-1218A4K	40-1218C4K*	40-1318A4K	40-1318C4K
	5 mm	40-1218A5K	40-1218C5K*	40-1318A5K	40-1318C5K
	6 mm	40-1218A6K	40-1218C6K*	40-1318A6K	40-1318C6K
200 mm	1 mm	40-1220A1K	40-1220C1K	40-1320A1K	40-1320C1K
	2 mm	40-1220A2K	40-1220C2K*	40-1320A2K	40-1320C2K
	3 mm	40-1220A3K	40-1220C3K*	40-1320A3K	40-1320C3K
	4 mm	40-1220A4K	40-1220C4K*	40-1320A4K	40-1320C4K
	5 mm	40-1220A5K	40-1220C5K*	40-1320A5K	40-1320C5K
	6 mm	40-1220A6K	40-1220C6K*	40-1320A6K	40-1320C6K
230 mm	1 mm	40-1223A1K	40-1223C1K	40-1323A1K	40-1323C1K
	2 mm	40-1223A2K	40-1223C2K*	40-1323A2K	40-1323C2K
	3 mm	40-1223A3K	40-1223C3K*	40-1323A3K	40-1323C3K
	4 mm	40-1223A4K	40-1223C4K*	40-1323A4K	40-1323C4K
	5 mm	40-1223A5K	40-1223C5K*	40-1323A5K	40-1323C5K
	6 mm	40-1223A6K	40-1223C6K*	40-1323A6K	40-1323C6K

*add „E“ behind catalog reference if desired with EJECTOR for immediate bone removal



1. Hold instrument as shown on picture (A) with the tip facing towards you and slightly press handle down. Observe the release nozzle marked in the picture (B) in red.
2. Press the black plastic trigger handle until the nozzle slips behind the bar, here marked in blue (C).
3. Release the handle slowly. The nozzle must always stay behind the bar. The upper shaft will now open up (D).
4. Instrument can now be thoroughly cleaned (E).

Attention: Do not press handle while cleaning as otherwise the nozzle will move out of the gap behind the bar (F). If this happens you must start with 1. and move it first back behind the bar (G) before reassembling!

5. For reassembling carefully push the upper shaft down into its fixation (H). Press the handle once with the other hand while still holding the upper shaft down. Instrument is then ready for use.

Attention: The reassembling process should work easily and smoothly. If it does not work, do not force or bend. Check and make sure the nozzle is in the gap.



Kerrison

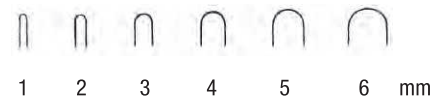


Footplate		Regular			Thin (Cervical)		
Working Length	Width	90° up	90° down	40° up	90° up	90° down	40° up
180 mm	1 mm	40-1018A1	40-1018B1	40-1018C1	40-1118A1	40-1118B1	40-1118C1
	2 mm	40-1018A2	40-1018B2	40-1018C2	40-1118A2	40-1118B2	40-1118C2
	3 mm	40-1018A3	40-1018B3	40-1018C3	40-1118A3	40-1118B3	40-1118C3
	4 mm	40-1018A4	40-1018B4	40-1018C4	40-1118A4	40-1118B4	40-1118C4
	5 mm	40-1018A5	40-1018B5	40-1018C5	40-1118A5	40-1118B5	40-1118C5
	6 mm	40-1018A6	40-1018B6	40-1018C6	40-1118A6	40-1118B6	40-1118C6
200 mm	1 mm	40-1020A1	40-1020B1	40-1020C1	40-1120A1	40-1120B1	40-1120C1
	2 mm	40-1020A2	40-1020B2	40-1020C2	40-1120A2	40-1120B2	40-1120C2
	3 mm	40-1020A3	40-1020B3	40-1020C3	40-1120A3	40-1120B3	40-1120C3
	4 mm	40-1020A4	40-1020B4	40-1020C4	40-1120A4	40-1120B4	40-1120C4
	5 mm	40-1020A5	40-1020B5	40-1020C5	40-1120A5	40-1120B5	40-1120C5
	6 mm	40-1020A6	40-1020B6	40-1020C6	40-1120A6	40-1120B6	40-1120C6
230 mm	1 mm	40-1023A1	40-1023B1	40-1023C1	40-1123A1	40-1123B1	40-1123C1
	2 mm	40-1023A2	40-1023B2	40-1023C2	40-1123A2	40-1123B2	40-1123C2
	3 mm	40-1023A3	40-1023B3	40-1023C3	40-1123A3	40-1123B3	40-1123C3
	4 mm	40-1023A4	40-1023B4	40-1023C4	40-1123A4	40-1123B4	40-1123C4
	5 mm	40-1023A5	40-1023B5	40-1023C5	40-1123A5	40-1123B5	40-1123C5
	6 mm	40-1023A6	40-1023B6	40-1023C6	40-1123A6	40-1123B6	40-1123C6
280 mm	1 mm	40-1028A1	40-1028B1	40-1028C1	40-1128A1	40-1128B1	40-1128C1
	2 mm	40-1028A2	40-1028B2	40-1028C2	40-1128A2	40-1128B2	40-1128C2
	3 mm	40-1028A3	40-1028B3	40-1028C3	40-1128A3	40-1128B3	40-1128C3
	4 mm	40-1028A4	40-1028B4	40-1028C4	40-1128A4	40-1128B4	40-1128C4
	5 mm	40-1028A5	40-1028B5	40-1028C5	40-1128A5	40-1128B5	40-1128C5
	6 mm	40-1028A6	40-1028B6	40-1028C6	40-1128A6	40-1128B6	40-1128C6

not detachable.



add „K“ behind catalog reference if desired with black ceramic coating



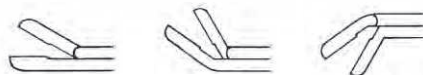
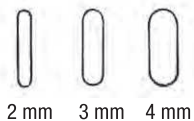
Wagner

Working Length	Jaw Width	straight
200 mm	5 mm	40-2380

K add „K“ behind catalog reference if desired with black ceramic coating

Intervertebral Disc Rongeurs

Ferris-Smith



Working Length

180 mm
180 mm
180 mm

Jaw Width x Length

2 x 10 mm
3 x 10 mm
4 x 10 mm

straight

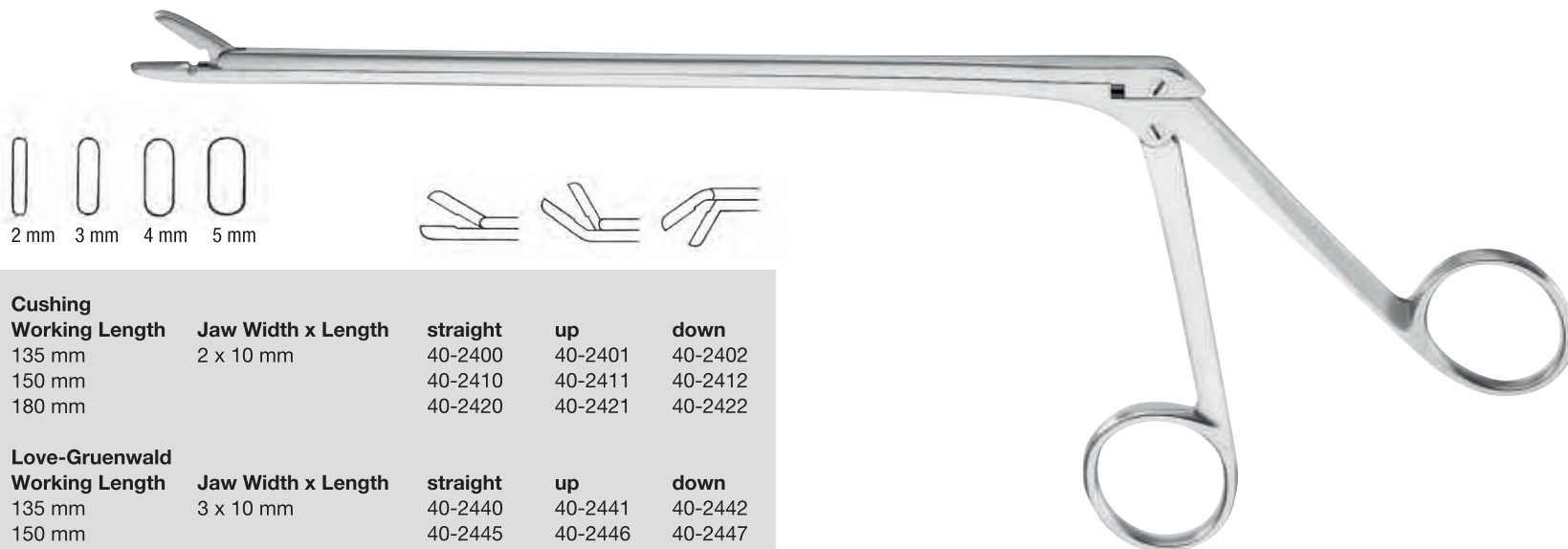
40-2500
40-2510
40-2520

up

40-2501
40-2511
40-2521

down

40-2502
40-2512
40-2522

**Cushing**

Working Length	Jaw Width x Length	straight	up	down
135 mm	2 x 10 mm	40-2400	40-2401	40-2402
150 mm		40-2410	40-2411	40-2412
180 mm		40-2420	40-2421	40-2422

Love-Gruenwald

Working Length	Jaw Width x Length	straight	up	down
135 mm	3 x 10 mm	40-2440	40-2441	40-2442
150 mm		40-2445	40-2446	40-2447
180 mm		40-2450	40-2451	40-2452

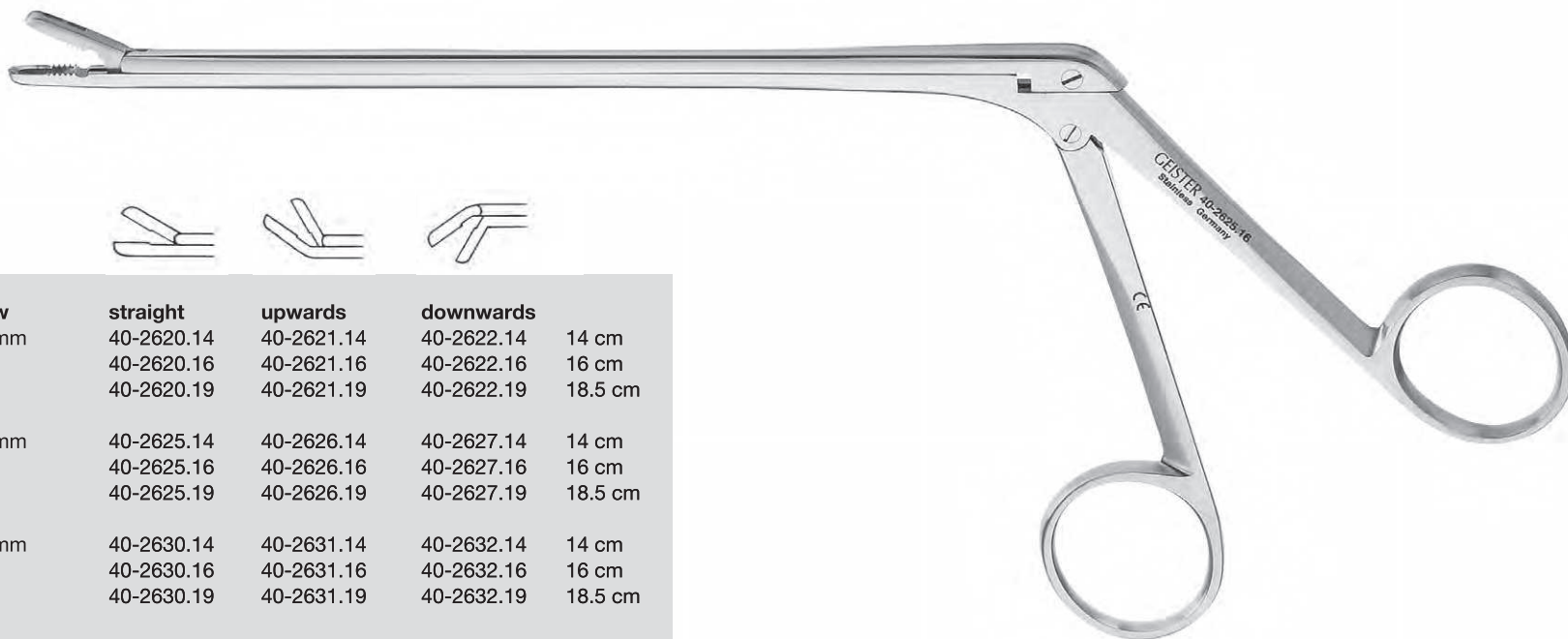
Spurling

Working Length	Jaw Width x Length	straight	up	down
135 mm	4 x 10 mm	40-2460	40-2461	40-2462
150 mm		40-2465	40-2466	40-2467
180 mm		40-2470	40-2471	40-2472

Gruenwald

Working Length	Jaw Width x Length	straight	up	down
135 mm	5 x 10 mm	40-2480	40-2481	40-2482
150 mm		40-2485	40-2486	40-2487
180 mm		40-2490	40-2491	40-2492
250 mm		40-2495	40-2496	40-2497

Caspar-type



jaw	straight	upwards	downwards	
2 mm	40-2620.14	40-2621.14	40-2622.14	14 cm
	40-2620.16	40-2621.16	40-2622.16	16 cm
	40-2620.19	40-2621.19	40-2622.19	18.5 cm
3 mm	40-2625.14	40-2626.14	40-2627.14	14 cm
	40-2625.16	40-2626.16	40-2627.16	16 cm
	40-2625.19	40-2626.19	40-2627.19	18.5 cm
4 mm	40-2630.14	40-2631.14	40-2632.14	14 cm
	40-2630.16	40-2631.16	40-2632.16	16 cm
	40-2630.19	40-2631.19	40-2632.19	18.5 cm
5 mm	40-2635.14	40-2636.14	40-2637.14	14 cm
	40-2635.16	40-2636.16	40-2637.16	16 cm
	40-2635.19	40-2636.19	40-2637.19	18.5 cm
6 mm	40-2640.14	40-2641.14	40-2642.14	14 cm
	40-2640.16	40-2641.16	40-2642.16	16 cm
	40-2640.19	40-2641.19	40-2642.19	18.5 cm

fenestrated jaw, serrated

Caspar-type

K black ceramic coating

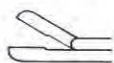
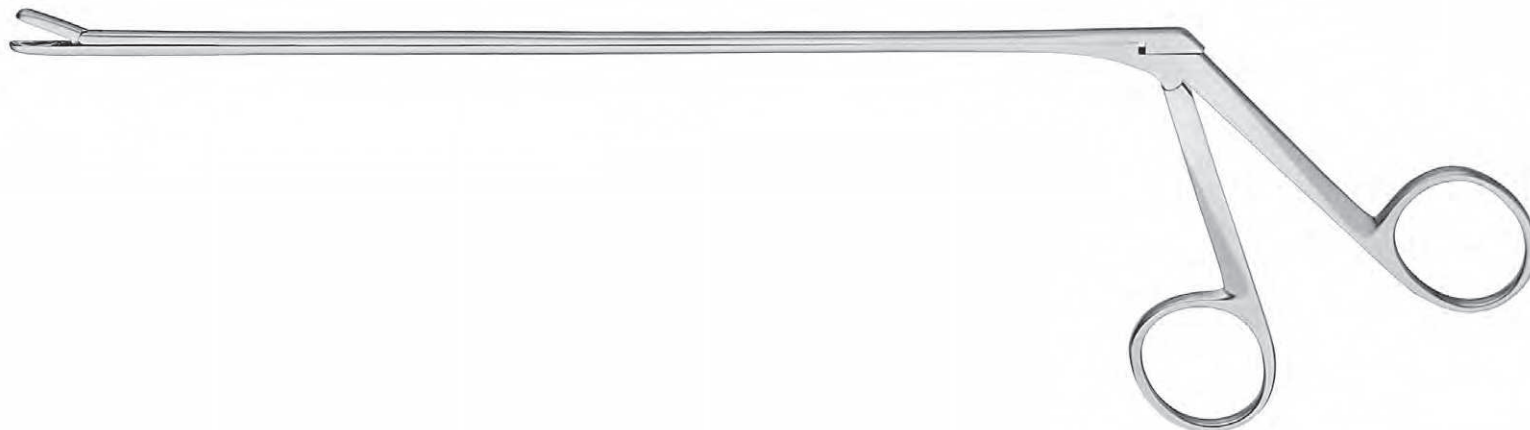


jaw	straight	upwards	downwards
2 mm	40-3000.16K 40-3000.18K	40-3001.16K 40-3001.18K	40-3002.16K 40-3002.18K
2.5 mm	40-3003.16K 40-3003.18K	40-3004.16K 40-3004.18K	40-3005.16K 40-3005.18K
3 mm	40-3006.16K 40-3006.18K	40-3007.16K 40-3007.18K	40-3008.16K 40-3008.18K
4 mm	40-3009.16K 40-3009.18K	40-3010.16K 40-3010.18K	40-3011.16K 40-3011.18K
5 mm	40-3012.16K 40-3012.18K	40-3013.16K 40-3013.18K	40-3014.16K 40-3014.18K
fenestrated jaw, serrated			

Intervertebral Disc Rongeurs

Decker

Micro Disc Rongeur



Jaw Width x Length
2 x 6 mm

straight cutting
41-0252 18.5 cm

upwards cutting
41-0262 18.5 cm

Oldberg



Working Length	2.2 mm	3.5 mm	7 mm	9 mm
190 mm	40-2570	40-2571	40-2572	40-2573
140 mm	40-2570.14	40-2571.14	40-2572.14	40-2573.14

Wilde (Weil-Blakesley)

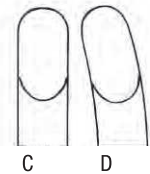


Working Length	Fig. 0	Fig. 1	Fig. 2	Fig. 3
140 mm	40-2560	40-2561	40-2562	40-2563
	2.5 mm	3.6 mm	4.2 mm	4.8 mm
not illustrated:				
45° angled up	40-2560.45	40-2561.45	40-2562.45	40-2563.45
90° angled up		40-2561.90	40-2562.90	
Working Length	Fig. 4	Fig. 5		
140 mm	40-2564	40-2565		
	5.3 mm	6.3 mm		
not illustrated:				
45° angled up	40-2564.45	40-2565.45		

Boehler



Luer-Stille



Boehler

15 cm 2 mm
15 cm 3 mm
15 cm 4 mm

A
40-0098
40-0100
40-0102

B
40-0099
40-0101
40-0103

Luer-Stille

22 cm 10 mm

C
40-0150

D
40-0151

Bone Biting Rongeurs

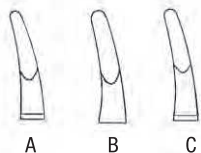
Beyer



Ruskin



Marquardt



Beyer

A

18 cm	3 mm	40-0104
18 cm	4 mm	40-0105

Ruskin

B

19 cm	4 mm	40-0115
19 cm	5 mm	40-0116
19 cm	6 mm	40-0117

Marquardt

C

20 cm	3 mm	40-0190
-------	------	---------

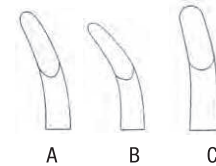
Zaufal-Jansen



Mayfield



Röttgen-Ruskin



Zaufal-Jansen

A

18 cm	5 mm	40-0195
-------	------	---------

Mayfield

B

18 cm	3 mm	40-0193
-------	------	---------

18 cm	4 mm	40-0194
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Röttgen-Ruskin

C

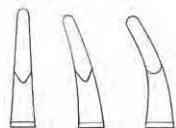
24 cm	5 mm	40-0116.24
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24 cm	6 mm	40-0117.24
-------	------	------------

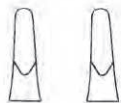
Bone Biting Rongeurs

Smith-Peterson

Leksell



A B C



D, slight bent/strong bent

Smith-Peterson

		A	B	C
19 cm	3 mm	40-0180	40-0181	40-0182
23 cm	3 mm	40-0185	40-0186	40-0187
23 cm	4 mm	40-0185.40	40-0186.40	40-0187.40

Leksell

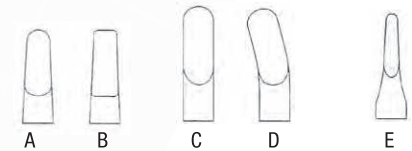
D		slight bent	strong bent
23 cm	3 mm	40-0124	
23 cm	5 mm	40-0126	40-0128
23 cm	8 mm	40-0125	40-0127



Stille

Stille-
Ruskin

Echlin



Stille

23 cm 6 mm

A

40-0130

B

40-0135

Stille-Ruskin

24 cm 6 mm
24 cm 8 mm

C

40-0119
40-0121

D

40-0120
40-0122

Echlin

23 cm 2 mm
23 cm 3 mm
23 cm 4 mm

E

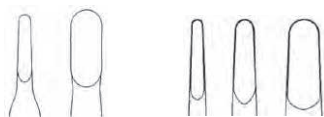
40-0140
40-0141
40-0142

Bone Biting Rongeurs

Dale



Sypert
(Mega-Luer)



A

B

Dale

A

35 cm	3 mm	40-0155
35 cm	8 mm	40-0155.08

Sypert

B

35 cm	3 mm	40-0165
35 cm	5 mm	40-0166
35 cm	8 mm	40-0167

Luer-Friedmann



Stellbrink



Luer-Friedmann
14.5 cm 40-0020

Stellbrink
17 cm 40-0035

Bone Cutting Forceps

Liston**Liston, angled**

24 cm 40-0207
27 cm 40-0208

De Vilbiss

20.5 cm 40-0199
Spare Blade 40-0199.EK

De Vilbiss

Skull Forceps



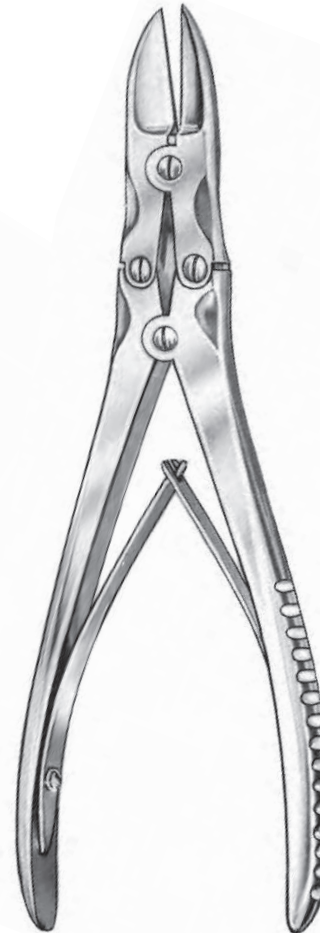
Boehler



Mc Indoe



Ruskin-Liston



Boehler
straight

15 cm 40-0200

curved

15 cm 40-0201

Mc Indoe

18 cm 40-0205

Ruskin-Liston
straight

19 cm 40-0210

curved

19 cm 40-0211

Wire Instruments

Wire Cutting Pliers



Wire Pliers



Wire Holding Forceps

Izzat Wire-Grip



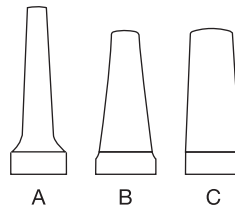
Wire-Twister





Wire Pliers

Fig.	Art.-No.	length mm / "
A	14-0670*	170 / 6 1/2



Wire-Twister

Fig.	Art.-No.	length mm / "	Insert / Tip
A	24-0956	180 / 7	Ⓢ 2 mm
B	24-0955	180 / 7	Ⓢ 4 mm
C	24-0950*	180 / 7	Ⓢ 6 mm

* **bold** = shown

Wire Holding Forceps

Art.-No.	length mm / "
14-0700*	130 / 5

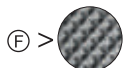
Wire Cutting Pliers

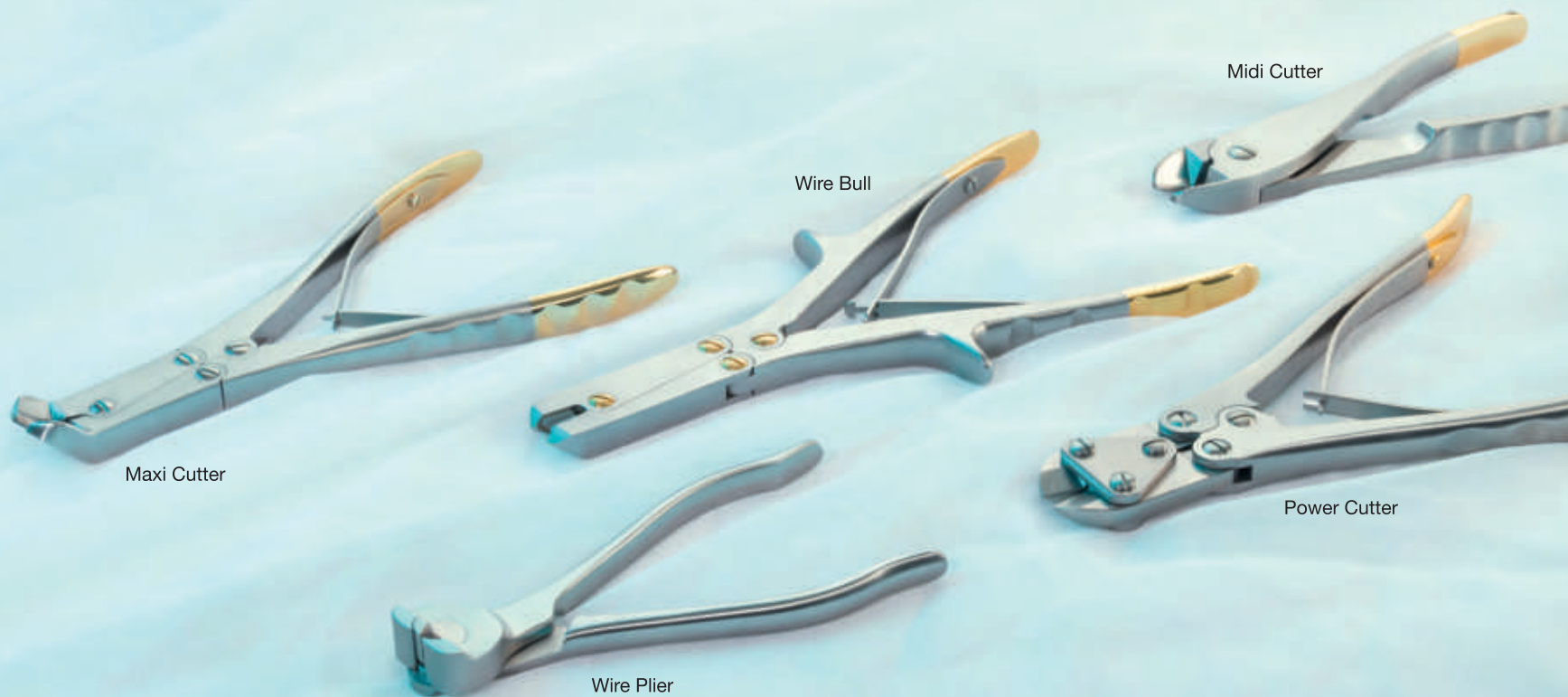
"removeable handles"

Art.-No.	length mm / "	Wire max. Ø
24-0930*	570 / 22	6,35 mm

Izzat Wire-Grip

Art.-No.	Wire max. Ø
14-0710*	1,3 mm





Maxi Cutter

Wire Bull

Midi Cutter

Power Cutter

Wire Plier



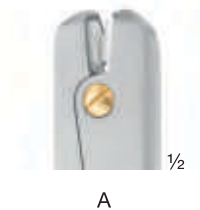
Midi Cutter

Art.-No.	length mm / "	Wire max. Ø
24-0906	180 / 7	1,5 mm
24-0905*	200 / 8	1,5 mm

Maxi Cutter

Art.-No.	length mm / "	Wire max. Ø
24-0910	175 / 7	1,7 mm
24-0920*	220 / 8	2,2 mm

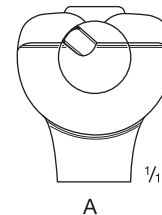
* bold = shown



Wire Bull

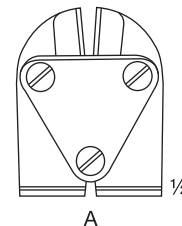
Fig.	Art.-No.	length mm / "	Wire max. Ø
A	24-0942	250 / 10	3 mm

Plastic inserts hold wire piece after being out



Wire Pliers

Fig.	Art.-No.	length mm / "
A	14-0675*	160 / 6 1/4



Power Cutter

also recommended for plates

Fig.	Art.-No.	length mm / "	Wire max. Ø
A	24-0940*	230 / 9	3,5 mm

Retractor and Blades

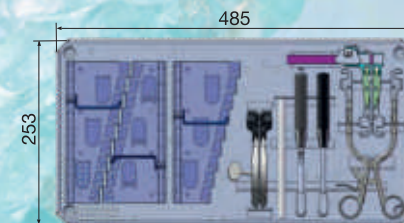
- Easy positionable
- Quick-connect side-loading mechanism
- Easy change of blades during operation with a special introducer handle
- Non-slip Caspar-type fenestrated titanium blades
- Color coded by width of blades (micro 19 mm = green, standard 24 mm = blue)
- Semi-transparency to x-ray
- Blade depths from 25 to 75 mm
- Compact and strong retractor body with anterior titanium hinges
- Lightweight





Introducer Handle

- simple, quick and safe change of blades
- also usable as hand-held retractor
- snap mechanism with secure grip
- straight-flush irrigation
- compatible with most traditional ball-snap closure systems



29-3608



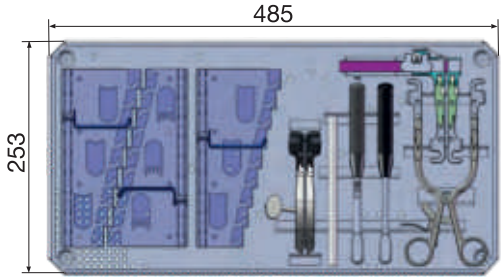
Cervical Retractor System

quick connect

Fig.	Art.-No.	description
A	29-3610.01	Transversal Basic Cervical Retractor 2-hinged, anterior titanium hinges
B	29-3612.01	Longitudinal Basic Counter Retractor 2-hinged, anterior titanium hinges
C	29-3614.01	Longitudinal Counter Retractor, Speculum, anterior titanium hinges

Cervical Retractor Set, complete in tray with lid

quick connect, with 24 mm blades



29-3608	consisting of		
Art.-No.	qty.	Art.-No.	qty.
29-3610.01	1	29-3628.40	1
29-3612.01	1	29-3628.45	1
29-3614.01	1	29-3628.50	1
29-3615.01	1	29-3628.55	1
29-3615.FL	1	29-3628.60	1
29-3609	1	29-3628.65	1
29-3627.30	1	29-3628.70	1
29-3627.35	1	29-3629.35	1
29-3627.40	1	29-3629.40	1
29-3627.45	1	29-3629.45	1
29-3627.50	1	29-3629.50	1
29-3627.55	1	29-3629.55	1
29-3627.60	1	29-3629.60	1
29-3627.65	1	29-3629.65	1
29-3627.70	1	29-3629.70	1
29-3628.30	1	29-3629.75	1
29-3628.35	1	77-7284	1

Tray

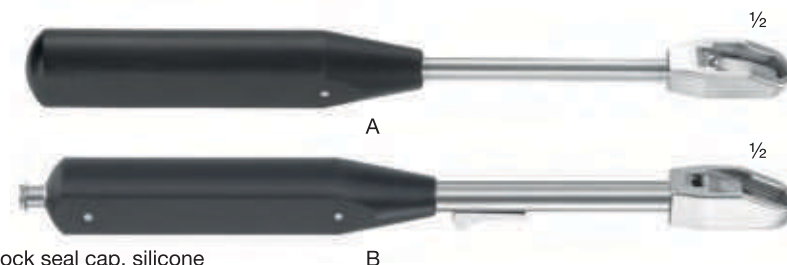
for SpineControl™ Cervical System

Art.-No.	description
77-7284	1/1 Type, with lid, 485 x 253 x 30 mm, perforated stainless steel

Introducer Handle for Blades

Can also be used as a hand-held retractor

Fig.	Art.-No.	description
A	29-3615.01	black PPSU handle, 195 mm / 7 ½"
B	29-3615.FL	black PPSU handle, 195 mm / 7 ½" Luer-Lock straight-flush irrigation and locking mechanism, with Luer-Lock seal cap, silicone



Depth Gauge, Peek nature

to determine the appropriate blade length

Fig.	Art.-No.	description
C	29-3609	160 mm, measuring range 100 mm

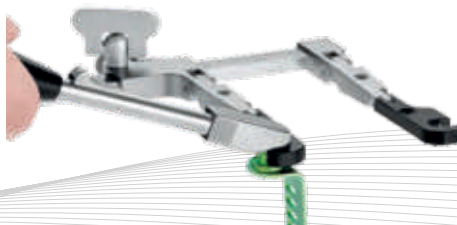


Instructions for our new introducer handle with cannulation and snap mechanism

1. Introduce and position the blades with the handle into the incision.



2. Catch and snap-in the blade with one anterior hinge of the retractor without removing retractor.



3. Once the blade is properly placed in the retractor the handle can be removed if desired.





Medial/Lateral Blades

toothed blades, Titanium,
quick connect, green, 19 mm width

Fig.	Art.-No.	length mm
A	29-3625.25	25
A	29-3625.30	30
A	29-3625.35	35
A	29-3625.40	40
A	29-3625.45	45
A	29-3625.50	50
A	29-3625.55	55
A	29-3625.60	60
A	29-3625.65	65
A	29-3625.70	70
A	29-3625.75	75

Blunt Blades

longitudinal, Titanium,
quick connect, green, 19 mm width

Fig.	Art.-No.	length mm
B	29-3626.25	25
B	29-3626.30	30
B	29-3626.35	35
B	29-3626.40	40
B	29-3626.45	45
B	29-3626.50	50
B	29-3626.55	55
B	29-3626.60	60
B	29-3626.65	65
B	29-3626.70	70
B	29-3626.75	75

Lateral Blades

short teeth, Titanium,
quick connect, blue, 24 mm width

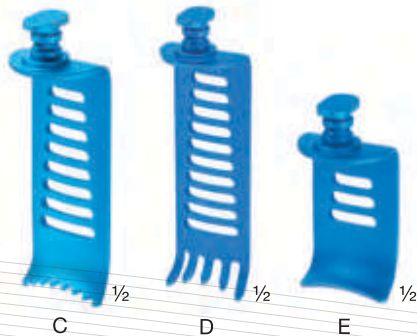


Fig.	Art.-No.	length mm
C	29-3627.25	25
C	29-3627.30	30
C	29-3627.35	35
C	29-3627.40	40
C	29-3627.45	45
C	29-3627.50	50
C	29-3627.55	55
C	29-3627.60	60
C	29-3627.65	65
C	29-3627.70	70
C	29-3627.75	75

Medial Blades

long teeth, Titanium,
quick connect, blue, 24 mm width

Fig.	Art.-No.	length mm
D	29-3628.25	25
D	29-3628.30	30
D	29-3628.35	35
D	29-3628.40	40
D	29-3628.45	45
D	29-3628.50	50
D	29-3628.55	55
D	29-3628.60	60
D	29-3628.65	65
D	29-3628.70	70
D	29-3628.75	75

Blunt Blades

longitudinal, Titanium,
quick connect, blue, 24 mm width

Fig.	Art.-No.	length mm
E	29-3629.25	25
E	29-3629.30	30
E	29-3629.35	35
E	29-3629.40	40
E	29-3629.45	45
E	29-3629.50	50
E	29-3629.55	55
E	29-3629.60	60
E	29-3629.65	65
E	29-3629.70	70
E	29-3629.75	75

**Retractor and Blades**

- Easy positionable
- Quick-connect side-loading mechanism
- Easy change of blades during operation with a special introducer handle
- Non-slip fenestrated titanium blades
- Semi-transparency to x-ray
- Choice of 20 mm blades for monosegmental access,
40 mm for bisegmental access and 60 mm for multisegmental access
- Compact and strong retractor body with anterior titanium hinges
- Lightweight



Introducer Handle

- simple, quick and safe change of blades
- also usable as hand-held retractor
- snap mechanism with secure grip
- straight-flush irrigation
- compatible with most traditional ball-snap closure systems



29-3604 Description see next page

Lumbar Retractor System

quick connect

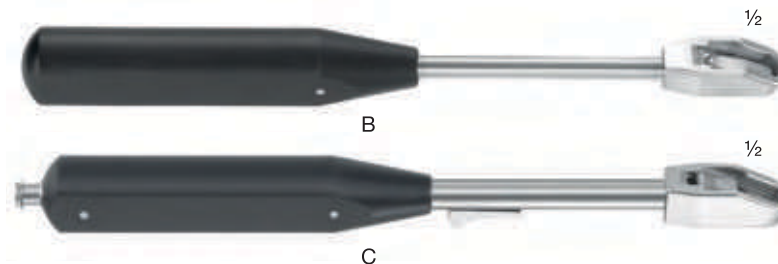
Fig.	Art.-No.	description
A	29-3605	Transversal Lumbar Retractor, hinged, anterior titanium hinges



Introducer handle for blades

Can also be used as a hand-held retractor

Fig.	Art.-No.	description
B	29-3615.01	black PPSU handle, 195 mm / 7 1/2"
C	29-3615.FL	black PPSU handle, 195 mm / 7 1/2" Luer-Lock and locking mechanism, with Luer-Lock seal cap, silicone



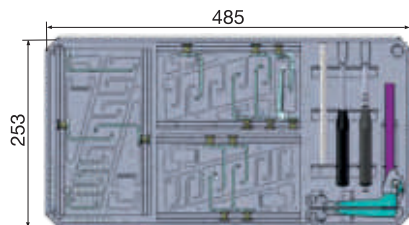
Depth Gauge, Peek nature

to determine the appropriate blade length

Fig.	Art.-No.	description
D	29-3609	160 mm, measuring range 100 mm



SpineControl™ Lumbar Retractor System (quick connect)



Lumbar Retractor Set complete in tray with lid

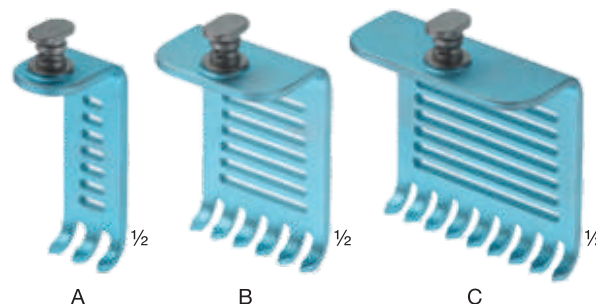
quick connect

29-3604	consisting of		
Art.-No.	qty.	Art.-No.	qty.
29-3605	1	29-3651.65	2
29-3615.FL	1	29-3651.75	2
29-3615.01	1	29-3652.35	2
29-3609	1	29-3652.40	2
29-3650.35	2	29-3652.45	2
29-3650.40	2	29-3652.55	2
29-3650.45	2	29-3652.65	2
29-3650.55	2	29-3652.75	2
29-3650.65	2	29-3652.85	2
29-3651.35	2	29-3655.01	1
29-3651.40	2	29-3655.02	1
29-3651.45	2	77-7286	1
29-3651.55	2		

Tray

for SpineControl™ Lumbar System

Art.-No.	description
77-7286	1/1 Type, with lid, 485 x 253 x 70 mm, perforated stainless steel



Lumbar Blades

20 mm width, Titanium, quick-connect

Fig.	Art.-No.	length mm
A	29-3650.35	35
A	29-3650.40	40
A	29-3650.45	45
A	29-3650.55	55
A	29-3650.65	65

40 mm width, Titanium, quick-connect

Fig.	Art.-No.	length mm
B	29-3651.35	35
B	29-3651.40	40
B	29-3651.45	45
B	29-3651.55	55
B	29-3651.65	65
B	29-3651.75	75



Hemi-Laminectomy Hook

Titanium, quick-connect, blue

Art.-No.	description
29-3655.01	small
29-3655.02	large

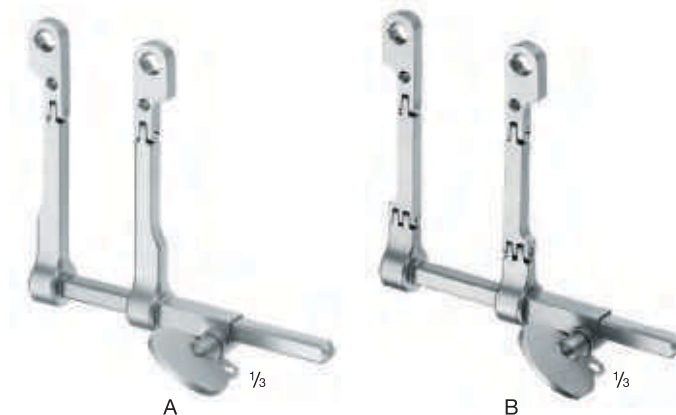
Transversal Basic Cervical Retractor

hinged

Fig.	Art.-No.	description	
A	29-3001	Stainless Steel, 65 mm regular spread	●
	29-3001L	Stainless Steel, 110 mm wide spread	●

double-hinged

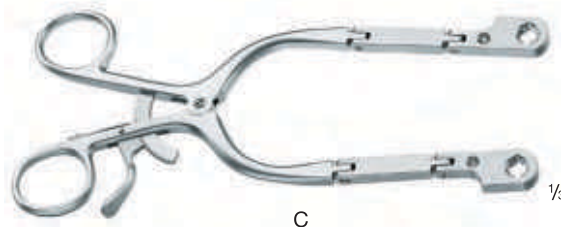
Fig.	Art.-No.	description	
B	29-3109	Stainless Steel, 65 mm spread	●



Longitudinal Basic Counter Retractor

double-hinged, ring handle, 205 mm

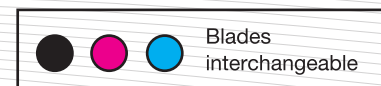
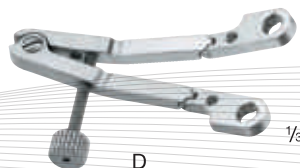
Fig.	Art.-No.	description	
C	29-3100	Stainless Steel, 85 mm spread	●



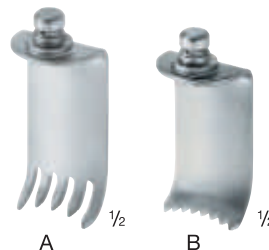
Longitudinal Counter Retractor Speculum

single-hinged, 115 mm

Fig.	Art.-No.	description	
D	29-3011	Stainless Steel, 70 mm regular spread	●



SpineControl™ Cervical Retractor System (Stainless Steel)



Medial Toothed Blades

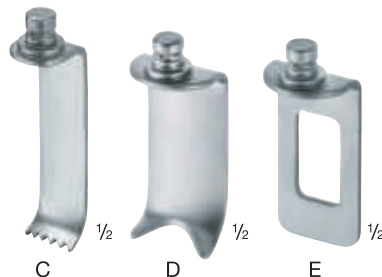
Stainless Steel, 23 mm width

Fig.	Art.-No.	length mm
A	29-3002.35	35
A	29-3002.40	40
A	29-3002.45	45
A	29-3002.50	50
A	29-3002.55	55
A	29-3002.60	60
A	29-3002.65	65
A	29-3002.70	70

Lateral Serrated Blades

Stainless Steel, 23 mm width

Fig.	Art.-No.	length mm
B	29-3003.40	40
B	29-3003.45	45
B	29-3003.50	50
B	29-3003.55	55
B	29-3003.60	60
B	29-3003.65	65
B	29-3003.70	70



Small Lateral Blades

Stainless Steel, 15 mm width

Fig.	Art.-No.	length mm
C	29-3004.40	40
C	29-3004.45	45
C	29-3004.50	50
C	29-3004.55	55
C	29-3004.60	60

Blunt Blades

Stainless Steel, 23 mm width

Fig.	Art.-No.	length mm
D	29-3012.35	35
D	29-3012.40	40
D	29-3012.45	45
D	29-3012.50	50
D	29-3012.55	55
D	29-3012.60	60
D	29-3012.65	65
D	29-3012.70	70
D	29-3012.75	75

Cervical Blades

Stainless Steel – fenestrated, 25 mm width

Fig.	Art.-No.	length mm
E	29-3014.50	50
E	29-3014.60	60

Caspar-type Cervial System Retractor

Stainless Steel, complete set for transverse retraction, 65 mm spread, adjustable with 5 medial and 5 lateral stainless steel blades

29-3000	consisting of						
Art.-No.	qty.	Art.-No.	qty.	Art.-No.	qty.	Art.-No.	qty.
29-3001	1	29-3002.50	1	29-3003.40	1	29-3003.55	1
29-3002.40	1	29-3002.55	1	29-3003.45	1	29-3003.60	1
29-3002.45	1	29-3002.60	1	29-3003.50	1		

Transversal Basic Cervical Retractor

hinged

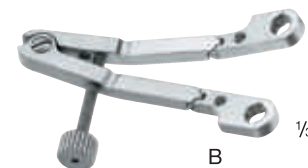
Fig.	Art.-No.	description
A	29-3001.TI	Titanium, 65 mm spread ●



Longitudinal Counter Retractor Speculum

single-hinged, 115 mm

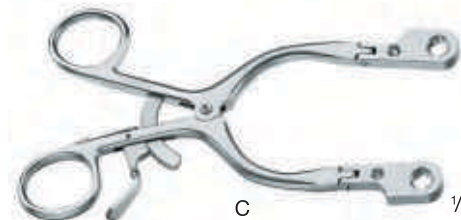
Fig.	Art.-No.	description
B	29-3011.TI	Titanium, 70 mm spread ●



Longitudinal Basic Counter Retractor

single-hinged, ring handle, 175 mm

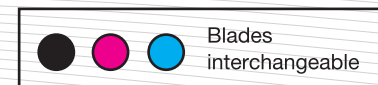
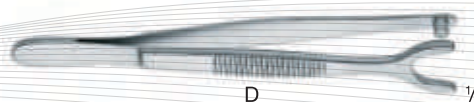
Fig.	Art.-No.	description
C	29-3013.TI	Titanium, 70 mm spread ●



Blade Changing Forceps

not suitable for quick connect blades

Fig.	Art.-No.	description
D	10-8000	115 mm ● ● ●



SpineControl™ Cervical Retractor System (Titanium)

Medial Toothed Blades

● Titanium, 20 mm width

Fig.	Art.-No.	length mm
A	29-3005.40	40
A	29-3005.45	45
A	29-3005.50	50
A	29-3005.55	55
A	29-3005.60	60
A	29-3005.65	65
A	29-3005.70	70
A	29-3005.75	75



● Titanium – fenestrated, 20 mm width

Fig.	Art.-No.	length mm
D	29-3016.35	35
D	29-3016.40	40
D	29-3016.45	45
D	29-3016.50	50
D	29-3016.55	55
D	29-3016.60	60
D	29-3016.65	65
D	29-3016.70	70



Lateral Serrated Blades

● Titanium, 20 mm width

Fig.	Art.-No.	length mm
B	29-3006.25	25
B	29-3006.30	30
B	29-3006.35	35
B	29-3006.40	40
B	29-3006.45	45
B	29-3006.50	50
B	29-3006.55	55
B	29-3006.60	60
B	29-3006.65	65
B	29-3006.70	70
B	29-3006.75	75



● Titanium – fenestrated, 20 mm width

Fig.	Art.-No.	length mm
E	29-3017.25	25
E	29-3017.30	30
E	29-3017.35	35
E	29-3017.40	40
E	29-3017.45	45
E	29-3017.50	50
E	29-3017.55	55
E	29-3017.60	60
E	29-3017.65	65
E	29-3017.70	70



Blunt Blades

● Titanium, 20 mm width

Fig.	Art.-No.	length mm
C	29-3015.30	30
C	29-3015.35	35
C	29-3015.40	40
C	29-3015.45	45
C	29-3015.50	50
C	29-3015.55	55
C	29-3015.60	60
C	29-3015.65	65
C	29-3015.70	70
C	29-3015.75	75



● Titanium – fenestrated, 20 mm width

Fig.	Art.-No.	length mm
F	29-3018.35	35
F	29-3018.40	40
F	29-3018.45	45
F	29-3018.50	50
F	29-3018.55	55
F	29-3018.60	60
F	29-3018.65	65
F	29-3018.70	70
F	29-3018.75	75



Caspar-type Cervial System Retractor

Titanium, complete set for transverse retraction, 65 mm spread, adjustable with 5 medial and 5 lateral titanium blades

29-3000.TI consisting of							
Art.-No.	qty.	Art.-No.	qty.	Art.-No.	qty.	Art.-No.	qty.
29-3001.TI	1	29-3005.50	1	29-3006.40	1	29-3006.55	1
29-3005.40	1	29-3005.55	1	29-3006.45	1	29-3006.60	1
29-3005.45	1	29-3005.60	1	29-3006.50	1		

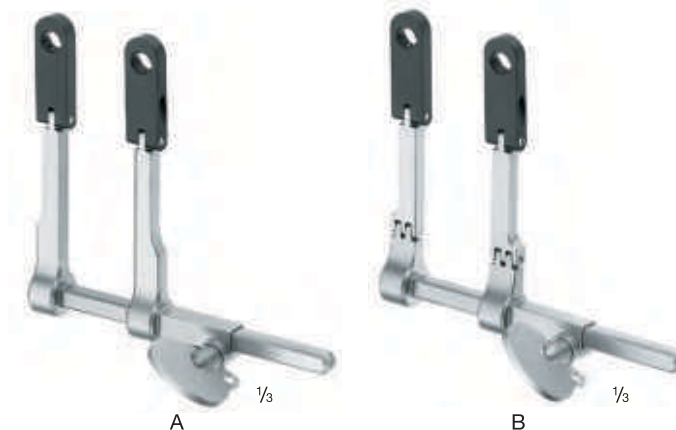
Transversal Basic Cervical Retractor

hinged

Fig.	Art.-No.	description
A	29-3001.PK	PEEK/Stainless Steel, 60 mm spread

double-hinged

Fig.	Art.-No.	description
B	29-3109.PK	PEEK/Stainless Steel, 65 mm spread



Longitudinal Basic Counter Retractor

single-hinged, ring handle, 175 mm

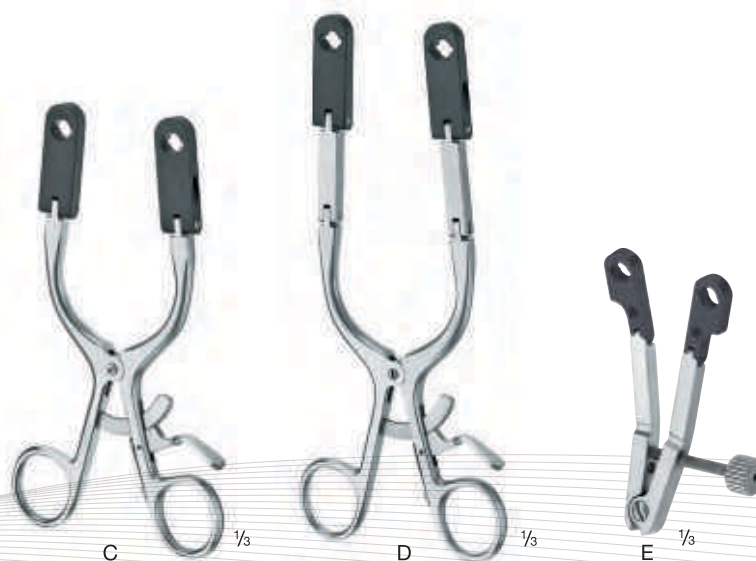
Fig.	Art.-No.	description
C	29-3013.PK	PEEK/Stainless Steel, 70 mm spread

double-hinged, ring handle, 205 mm

Fig.	Art.-No.	description
D	29-3100.PK	PEEK/Stainless Steel, 70 mm spread

single-hinged, 115 mm

Fig.	Art.-No.	description
E	29-3011.PK	PEEK/Stainless Steel, 70 mm spread



Blades
interchangeable



Small Lateral Serrated Blades

● PEEK, 12 mm width

Fig.	Art.-No.	length mm
A	29-3029.40	40
A	29-3029.45	45
A	29-3029.50	50
A	29-3029.55	55



Medial Toothed Blades

● PEEK, 23 mm width

Fig.	Art.-No.	length mm
B	29-3032.40	40
B	29-3032.45	45
B	29-3032.50	50
B	29-3032.55	55
B	29-3032.60	60
B	29-3032.65	65
B	29-3032.75	75



Lateral Serrated Blades

● PEEK, 23 mm width

Fig.	Art.-No.	length mm
C	29-3030.40	40
C	29-3030.45	45
C	29-3030.50	50
C	29-3030.55	55
C	29-3030.60	60
C	29-3030.65	65
C	29-3030.75	75



Blunt Blades

● PEEK, 23 mm width

Fig.	Art.-No.	length mm
D	29-3033.40	40
D	29-3033.45	45
D	29-3033.50	50
D	29-3033.55	55
D	29-3033.60	60
D	29-3033.65	65
D	29-3033.75	75



PEEK – rotating, 23 mm width

Fig.	Art.-No.	length mm
E	29-3031.40	40
E	29-3031.45	45
E	29-3031.50	50
E	29-3031.55	55
E	29-3031.60	60
E	29-3031.65	65
E	29-3031.75	75



PEEK – rotating, 23 mm width

Fig.	Art.-No.	length mm
F	29-3034.40	40
F	29-3034.45	45
F	29-3034.50	50
F	29-3034.55	55
F	29-3034.60	60
F	29-3034.65	65
F	29-3034.75	75

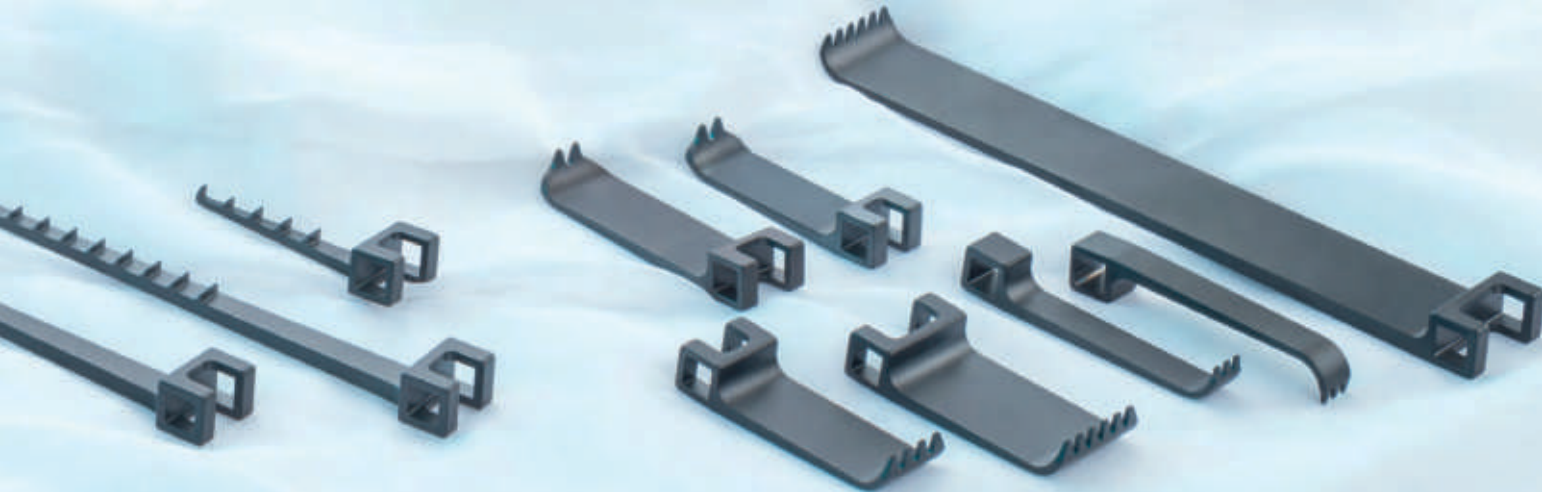


Blade Positioner

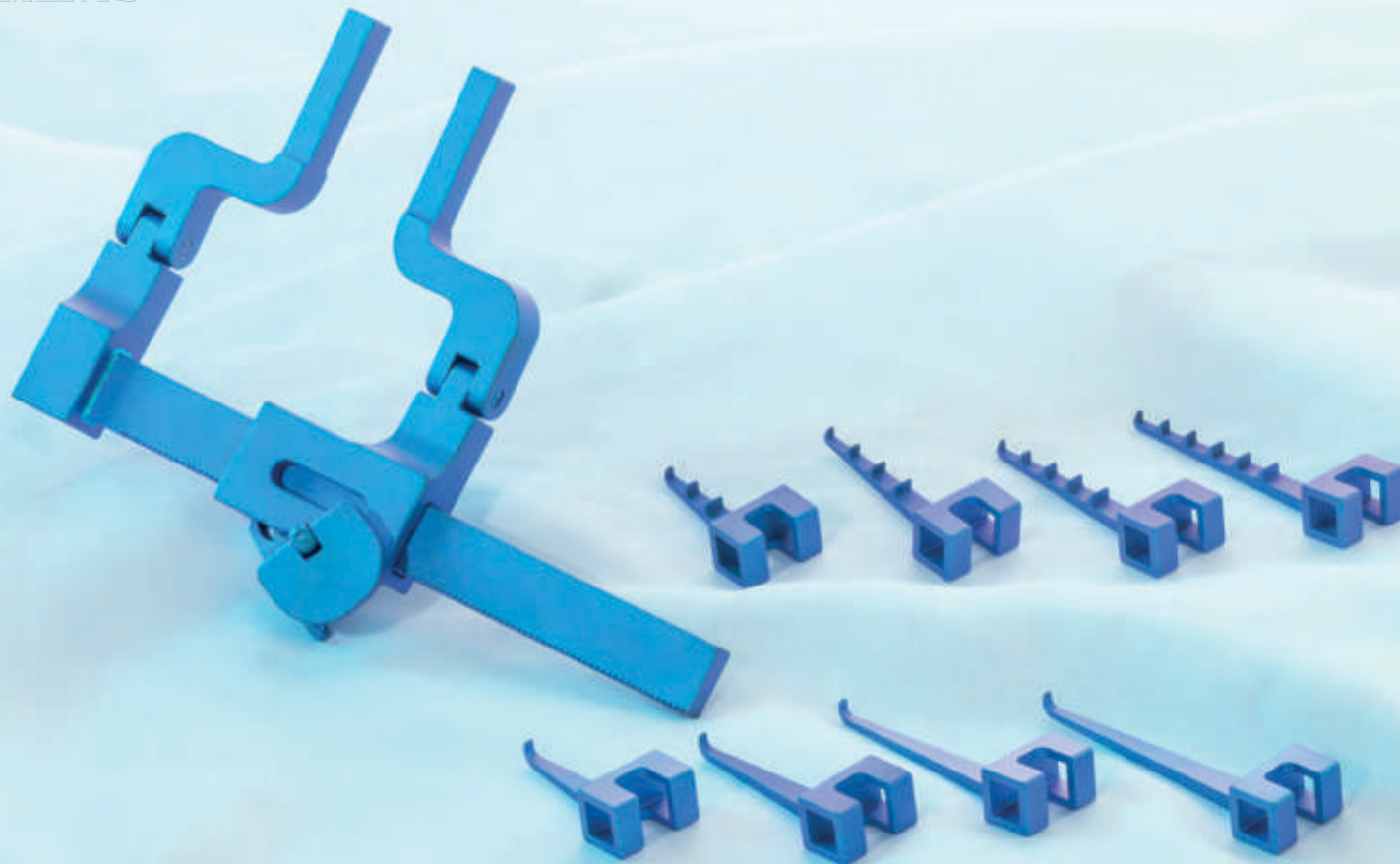
PEEK – Handle

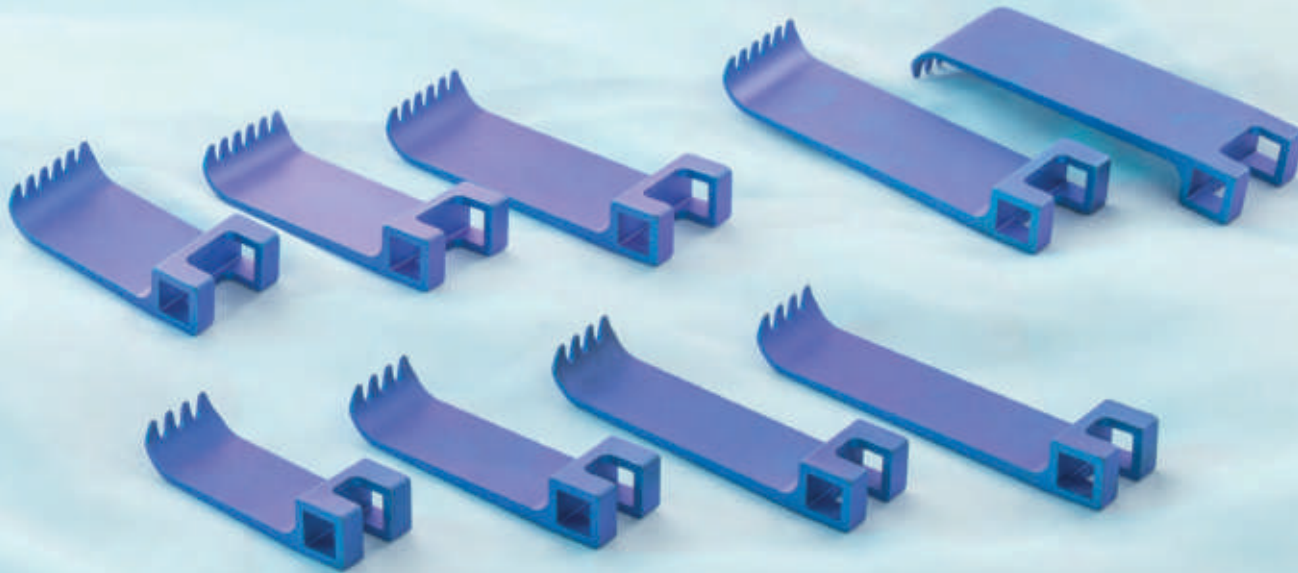
Fig.	Art.-No.	length mm
G	29-3615.PK	200



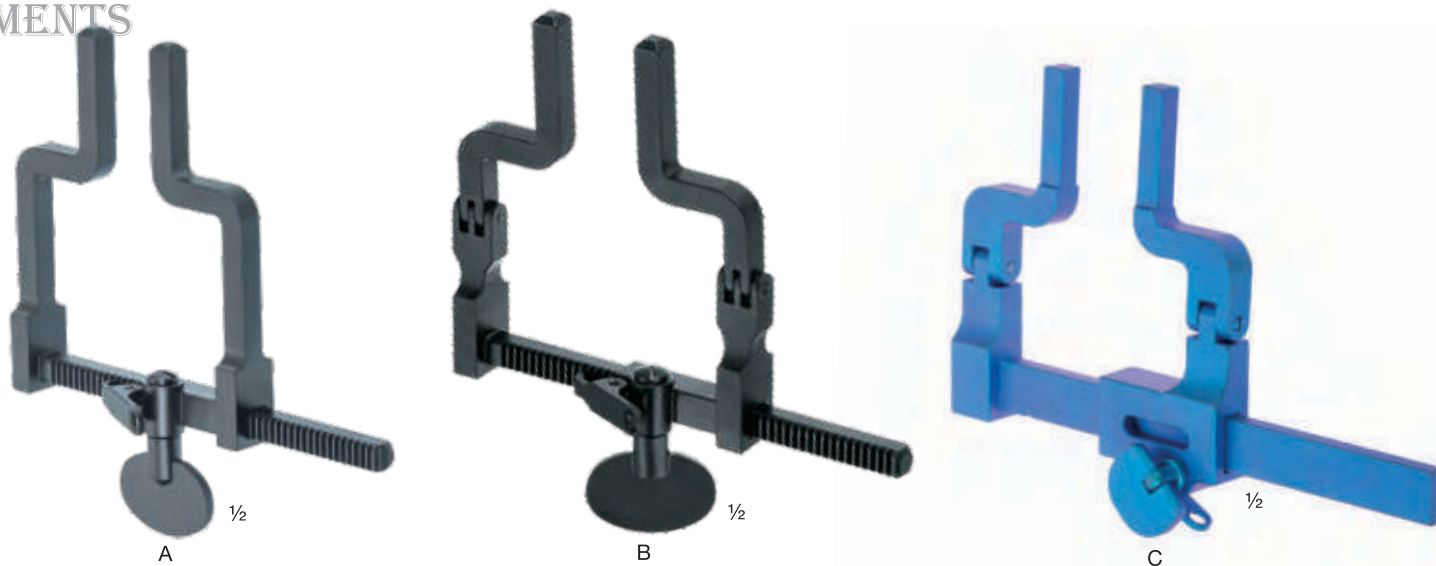


Microdissectomy Retractor System (Titanium)





Microdissection Retractor System, McCulloch



Microdissection Retractor McCulloch

rigid, black coated

Fig.	Art.-No.	max. spread mm
A	29-3701	70
A	29-3700	90

hinged, black coated

Fig.	Art.-No.	max. spread mm
B	29-3702	70
B	29-3702.90	90
B	29-3703	150

hinged, Titanium

Fig.	Art.-No.	max. spread mm
C	29-3704.TI	110



A

1/6

Microdissectomy retractor set Titanium

29-3719		consisting of		
Fig.	Art.-No.	qty.	Art.-No.	qty.
A	29-3704.TI	1	29-3707.30TI	1
A	29-3706.40TI	2	29-3707.40TI	1
A	29-3706.50TI	2	29-3707.50TI	1
A	29-3706.60TI	2	29-3707.60TI	1
A	29-3706.70TI	2	29-3708.30TI	1
A	29-3705.40TI	2	29-3708.40TI	1
A	29-3705.50TI	2	29-3708.50TI	1
A	29-3705.60TI	2	29-3708.60TI	1
A	29-3705.70TI	2	29-3720	1



B

1/6

Tray

for 1 Retractor and 24 blades

Fig.	Art.-No.	size mm
B	29-3720	265 x 265

for 1 Retractor and 24 blades and 4 long blades 180 mm

Art.-No.	size mm
29-3720.L	265 x 265

Container

suitable for tray 29-3720 or 29-3720.L

Art.-No.	size mm
29-3721	285 x 285 x 55 without illustration

Narrow Muscle Blades

black coated, 4-teeth, 20 mm width

Fig.	Art.-No.	length mm
A	29-3705.30	30
A	29-3705.40	40
A	29-3705.50	50
A	29-3705.60	60
A	29-3705.70	70
A	29-3705.80	80
A	29-3705.90	90
A	29-3705.100	100
A	29-3705.110	110
A	29-3705.120	120
A	29-3705.180	180

Wide Muscle Blades

black coated, 6-teeth, 27 mm width

Fig.	Art.-No.	length mm
B	29-3706.30	30
B	29-3706.40	40
B	29-3706.50	50
B	29-3706.60	60
B	29-3706.70	70
B	29-3706.80	80
B	29-3706.90	90
B	29-3706.100	100
B	29-3706.110	110
B	29-3706.120	120
B	29-3706.180	180

Hook Blades

black coated

Fig.	Art.-No.	length mm
C	29-3707.20	20
C	29-3707.30	30
C	29-3707.40	40
C	29-3707.50	50
C	29-3707.60	60
C	29-3707.70	70
C	29-3707.80	80
C	29-3707.90	90
C	29-3707.100	100
C	29-3707.180	180

Hook Blades

black coated, multiple-toothed

Fig.	Art.-No.	length mm
D	29-3708.20	20
D	29-3708.30	30
D	29-3708.40	40
D	29-3708.50	50
D	29-3708.60	60
D	29-3708.70	70
D	29-3708.80	80
D	29-3708.90	90
D	29-3708.100	100
D	29-3708.180	180

Thin Muscle Blades

black coated, 2-teeth, 17 mm width

Fig.	Art.-No.	length mm
F	29-3710.30	30
F	29-3710.40	40
F	29-3710.50	50
F	29-3710.60	60
F	29-3710.70	70
F	29-3710.80	80
F	29-3710.90	90

Cervical Blades

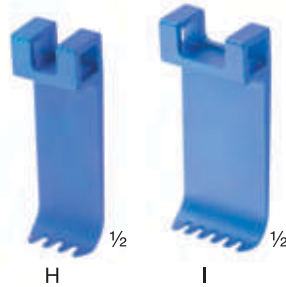
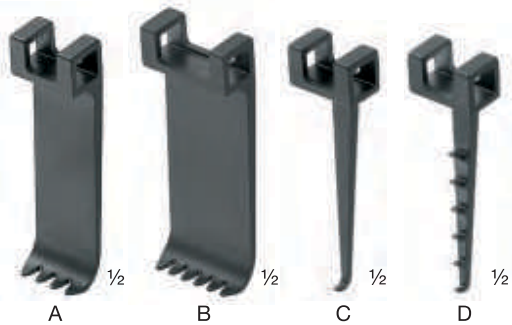
black coated, 2-teeth, 20 mm width

Fig.	Art.-No.	length mm
E	29-3709.40	40
E	29-3709.50	50
E	29-3709.60	60
E	29-3709.70	70

Extra Thin Muscle Blades

black coated, 3-teeth, 10 mm width

Fig.	Art.-No.	length mm
G	29-3711.30	30
G	29-3711.40	40
G	29-3711.50	50
G	29-3711.60	60
G	29-3711.70	70
G	29-3711.80	80



Narrow Muscle Blades

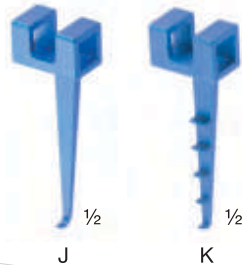
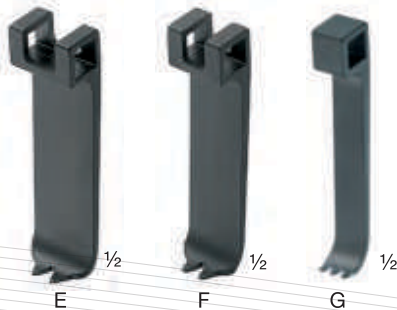
Titanium, 4-teeth, 20 mm width

Fig.	Art.-No.	length mm
H	29-3705.30Ti	30
H	29-3705.40Ti	40
H	29-3705.50Ti	50
H	29-3705.60Ti	60
H	29-3705.70Ti	70
H	29-3705.80Ti	80

Wide Muscle Blades

Titanium, 4-teeth, 27 mm width

Fig.	Art.-No.	length mm
I	29-3706.30Ti	30
I	29-3706.40Ti	40
I	29-3706.50Ti	50
I	29-3706.60Ti	60
I	29-3706.70Ti	70
I	29-3706.80Ti	80



Hook Blades

Titanium

Fig.	Art.-No.	length mm
J	29-3707.20Ti	20
J	29-3707.30Ti	30
J	29-3707.40Ti	40
J	29-3707.50Ti	50
J	29-3707.60Ti	60
J	29-3707.70Ti	70

Hook Blades

Titanium, multiple-toothed

Fig.	Art.-No.	length mm
K	29-3708.20Ti	20
K	29-3708.30Ti	30
K	29-3708.40Ti	40
K	29-3708.50Ti	50
K	29-3708.60Ti	60
K	29-3708.70Ti	70

Microdiscectomy Retractor System

Paraspinal

Lateral



Caspar-type Microdiscectomy Retractor

for microsurgical treatment of herniated lumbar discs
stainless steel, 45 mm spread

- 29-3520 Frame only, hinged, ends black,
29-3520K Frame only, hinged, completely black

Lateral Blades

29-3522 – 35 mm
29-3524 – 40 mm
29-3526 – 45 mm
29-3528 – 50 mm
29-3530 – 55 mm
29-3532 – 60 mm
29-3534 – 65 mm
29-3538 – 75 mm
29-3542 – 85 mm



Paraspinal Blades

29-3521 – 40 mm
29-3523 – 45 mm
29-3525 – 50 mm
29-3527 – 55 mm
29-3529 – 60 mm
29-3531 – 65 mm
29-3533 – 70 mm



Lumbar Speculum fenestrated

29-3500 – 40 mm
29-3502 – 45 mm
29-3504 – 50 mm
29-3506 – 55 mm
29-3508 – 60 mm
29-3510 – 65 mm
29-3512 – 75 mm
29-3514 – 85 mm





29-3550.DR

29-3550.SP

29-3550 Caspar-type Vertebral Column Retractor
for Laminectomy and Hemilaminectomy (Lumbar, Thoracic, Cervical), stainless steel, complete set, 145 mm spread, 125 mm arms, consisting of:
29-3550.SP, 29-3550.DR, 29-3552, 29-3381, 29-3382, 29-3383, 29-3384, 29-3385

29-3550.SP - Frame only, 145mm spread, hinged
includes 29-3550.DR – Screw Driver for spreading bar



29-3552 – 38 mm
29-3551 – 58 mm



29-3380 – 22 x 32 mm
29-3381 – 22 x 37 mm
29-3382 – 22 x 43 mm
29-3383 – 22 x 47 mm
29-3384 – 22 x 52 mm
29-3385 – 22 x 57 mm
29-3386 – 22 x 62 mm
29-3387 – 22 x 67 mm



29-3360 – 37 x 32 mm
29-3361 – 37 x 37 mm
29-3362 – 37 x 43 mm
29-3363 – 37 x 47 mm
29-3364 – 37 x 52 mm
29-3365 – 37 x 57 mm
29-3366 – 37 x 62 mm
29-3367 – 37 x 67 mm



29-3370 – 52 x 32 mm
29-3371 – 52 x 37 mm
29-3372 – 52 x 43 mm
29-3373 – 52 x 47 mm
29-3374 – 52 x 52 mm
29-3375 – 52 x 57 mm
29-3376 – 52 x 62 mm
29-3377 – 52 x 67 mm

Vertebral Body Distractor for Anterior Cervical Fusion



Caspar-type

29-3131 Distractor only for use in surgical procedures from the left approach for C5 through T1 (T2) and from the right approach for the upper cervical spine

29-3131L Distractor as above but with elongated toothed bar for multilevel (more than 2) distraction

29-3132
Drill Guide

29-3135
Screw Driver

Distraction Pin	A/B	
29-3134.12	66/12 mm	
29-3134.14	68/14 mm	
29-3134.16	70/16 mm	29-3133
29-3134.18	72/18 mm	Twist Drill

Vertebral Body Distractor for Anterior Cervical Fusion



Caspar-type

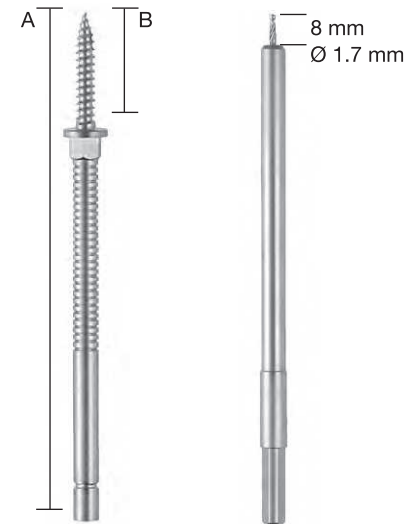
29-3141 Distractor only for use in surgical procedures from the right approach for C5 through T1 (T2) and from the left approach for the upper cervical spine

29-3141L Distractor as above but with elongated toothed bar for multilevel (more than 2) distraction



29-3142
Drill Guide

29-3135
Screw Driver



Distraction Pin	A/B	
29-3134.12	66/12 mm	
29-3134.14	68/14 mm	
29-3134.16	70/16 mm	29-3133
29-3134.18	72/18 mm	Twist Drill



Cloward-type

Vertebra Spreaders

29-3200 13 cm, 18 mm spread



one pointed tip

29-3201 7 cm arm, 80 mm spread



three pointed tips

29-3202 8.5 cm arm, 70 mm spread

29-3203 10 cm arm, 70 mm spread

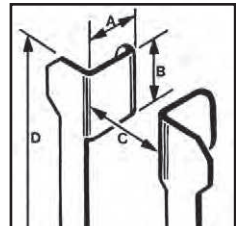
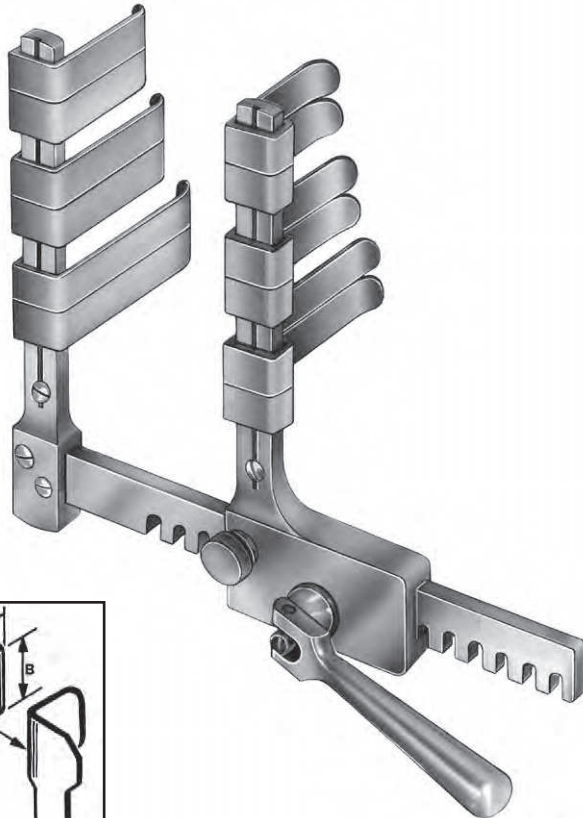


Inge

Lamina Spreaders

29-3210 16.5 cm

29-3212 28 cm



Art.-No.	A	B	C	D
29-3400			110 mm	132 mm
	with 3 x 2 pairs of movable blunt blades			
29-3400.40V	40 mm	12 mm		
29-3400.50V	50 mm	12 mm		
29-3400.65V	65 mm	12 mm		

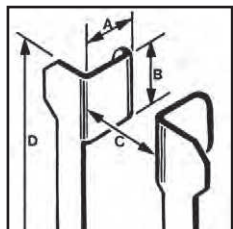


Badgley

	A	B	C	D
29-3410	48 mm	45 mm	170 mm	110 mm

Vertebral Column Retractors

Optional blades



Scoville-Haverfield

	A	B	C	D
29-3160	63 mm	26 mm	140 mm	140 mm
	50 mm	5 mm		

with 1 each blade 29-3165.50 and 29-3162.51

Frame only, hinged:

29-3161	–	–	140 mm	140 mm
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3-prongs:

29-3163.50 44 mm x 38 mm

4-prongs:

29-3163.60 41 mm x 38 mm
 29-3163.75 66 mm x 48 mm
 29-3164.50 48 mm x 51 mm
 29-3164.60 63 mm x 63 mm
 29-3164.75 82 mm x 58 mm



Toothed:

29-3165.50 63 mm x 26 mm
 29-3165.60 66 mm x 30 mm
 29-3165.75 89 mm x 26 mm
 29-3166.50 51 mm x 51 mm
 29-3166.60 63 mm x 51 mm
 29-3166.75 76 mm x 51 mm



Hook-shaped, blunt:

29-3162.51 50 mm x 5 mm
 29-3162.76 75 mm x 5 mm



Cloward-type

with ball snap closure, 25.5 cm

29-3120

Cervical Retractor complete consisting of:

29-3121, 29-3121.40, 29-3121.45,
29-3121.50, 29-3121.55, 29-3121.60

29-3121 Retractor Body 25.5 cm, 110 mm spread
(without blades)

Exchangeable blades



29-3121.40	15 x 40 mm, serrated
29-3121.45	15 x 45 mm, serrated
29-3121.50	15 x 50 mm, serrated
29-3121.55	15 x 55 mm, serrated
29-3121.60	15 x 60 mm, serrated

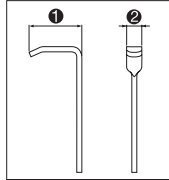


29-3122.40	15 x 40 mm, blunt
29-3122.45	15 x 45 mm, blunt
29-3122.50	15 x 50 mm, blunt
29-3122.55	15 x 55 mm, blunt
29-3122.60	15 x 60 mm, blunt

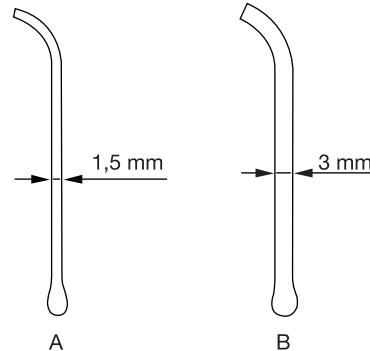


Left hand

Right hand



- ❶ first number
= depth/length
- ❷ second number
= width



Williams

Right hand, length 170 mm

Fig.	Art.-No.	width 10 mm	width 20 mm
A	29-3250R.15	50 x 10	
A	29-3252R.15	60 x 10	
A	29-3254R.15	70 x 10	
A	29-3251R.15		50 x 20
A	29-3253R.15		60 x 20
A	29-3255R.15		70 x 20
B	29-3250R	50 x 10	
B	29-3252R	60 x 10	
B	29-3254R	70 x 10	
B	29-3251R		50 x 20
B	29-3253R		60 x 20
B	29-3255R		70 x 20

Left hand, length 170 mm

Fig.	Art.-No.	width 10 mm	width 20 mm
A	29-3250L.15	50 x 10	
A	29-3252L.15	60 x 10	
A	29-3254L.15	70 x 10	
A	29-3251L.15		50 x 20
A	29-3253L.15		60 x 20
A	29-3255L.15		70 x 20
B	29-3250L	50 x 10	
B	29-3252L	60 x 10	
B	29-3254L	70 x 10	
B	29-3251L		50 x 20
B	29-3253L		60 x 20
B	29-3255L		70 x 20

For microsurgical treatment of herniated discs.



Cone

30-0640	14 cm, 18 mm	3 x 4 prongs sharp
30-0642	16 cm, 18 mm	3 x 4 prongs sharp
30-0644	20 cm, 20 mm	3 x 4 prongs sharp
30-0648	24 cm, 27 mm	3 x 4 prongs sharp
30-0641	14 cm, 18 mm	3 x 4 prongs blunt
30-0643	16 cm, 18 mm	3 x 4 prongs blunt
30-0645	20 cm, 20 mm	3 x 4 prongs blunt
30-0649	24 cm, 27 mm	3 x 4 prongs blunt

Markham-Meyerding

Hemilaminectomy Retractor

30-0631 18 cm, 50 x 25 mm left

30-0630 18 cm, 50 x 25 mm right



Mini-Weitlaner

30-0590 11 cm, 16 mm 2 x 3 prongs sharp
30-0592 11 cm, 16 mm 2 x 3 prongs blunt



Weitlaner

30-0600	13 cm, 18 mm	3 x 4 prongs sharp
30-0605	16 cm, 18 mm	3 x 4 prongs sharp
30-0610	20 cm, 21 mm	3 x 4 prongs sharp
30-0615	25 cm, 27 mm	3 x 4 prongs sharp
30-0602	13 cm, 18 mm	3 x 4 prongs blunt
30-0607	16 cm, 18 mm	3 x 4 prongs blunt
30-0612	20 cm, 21 mm	3 x 4 prongs blunt
30-0617	25 cm, 27 mm	3 x 4 prongs blunt



Anderson-Adson

Cerebellar Retractor

30-0635 20 cm 4 x 4 prongs sharp



Weitlaner

30-0620	26 cm, 27 mm	5 x 6 prongs sharp
30-0622	26 cm, 27 mm	5 x 6 prongs blunt



Hemilaminectomy

30-0760	29 cm, 42 mm	6 x 6 prongs sharp
30-0761	29 cm, 42 mm	6 x 6 prongs blunt



Right blade 42 mm, left blade 22 mm deep

30-0762	29 cm, 22/42 mm	6 x 6 prongs sharp
30-0763	29 cm, 22/42 mm	6 x 6 prongs blunt

Right blade 22 mm, left blade 42 mm deep

30-0764	29 cm, 22/42 mm	6 x 6 prongs sharp
30-0765	29 cm, 22/42 mm	6 x 6 prongs blunt



Scalp Contour

30-0770	14 cm, 18 mm	1 x 1 prongs blunt
30-0772	14 cm, 18 mm	3 x 3 prongs blunt
30-0774	14 cm, 18 mm	3 x 4 prongs sharp
30-0775	14 cm, 18 mm	3 x 4 prongs blunt



Beckmann-Adson

30-0665	31 cm, 25 mm	4 x 4 prongs sharp
30-0667	31 cm, 37 mm	4 x 4 prongs sharp
30-0670	31 cm, 48 mm	4 x 4 prongs sharp
30-0666	31 cm, 25 mm	4 x 4 prongs blunt
30-0668	31 cm, 37 mm	4 x 4 prongs blunt
30-0671	31 cm, 48 mm	4 x 4 prongs blunt



Beckmann-Eaton

30-0662	32 cm, 50 mm	7 x 7 prongs sharp
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Miskimon

30-0820	22 cm, 35 mm	7 x 7 prongs sharp
30-0822	22 cm, 35 mm	7 x 7 prongs blunt



Adson

30-0651	19 cm, 23 mm	4 x 4 prongs sharp
30-0652	19 cm, 23 mm	4 x 4 prongs blunt



30-0653	19 cm, 23 mm	4 x 4 prongs sharp
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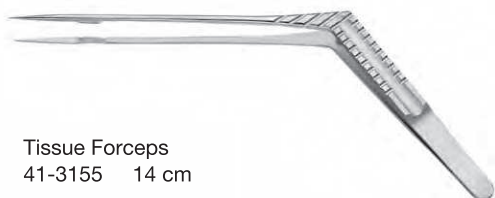
Norfolk & Norwich
Hemilaminectomy Retractor

30-0636 22 cm, 50 mm 4 x 5 prongs blunt

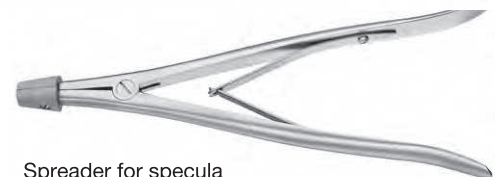


Gelpi
Skin Retractor

30-0791 18.5 cm



Tissue Forceps
41-3155 14 cm



Spreader for specula
29-4220 21 cm



Screw Driver
29-4215



Spreader for specula
29-4221



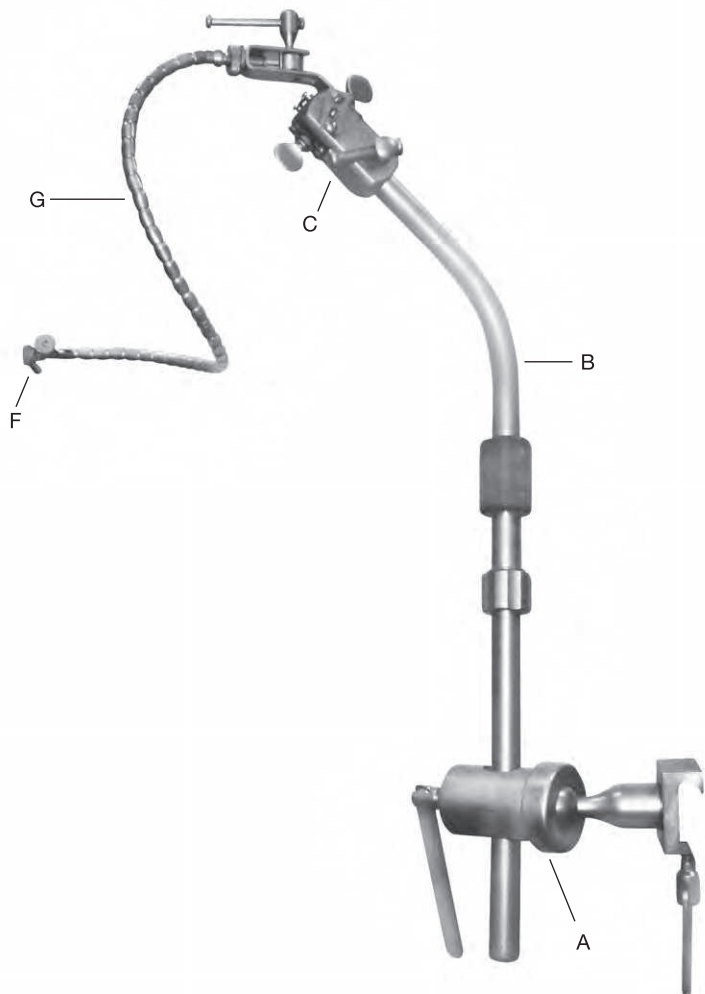
Cushing-Landolt

Specula	
29-4200	70 x 15 mm
29-4201	90 x 15 mm
29-4202	110 x 15 mm



Papavero-Caspar

Specula	
(including Screw Driver 29-4215)	
29-4211	80 x 11 mm
29-4212	90 x 13 mm
29-4213	100 x 15 mm



For three dimensional fixation of spatulas

- A** 41-7080 Ball- and Socket Joint, for fixing holding rod 41-7083 to pole of operating table 10 x 25 mm.
- B** 41-7083 Holding Rod, for fixation in ball- and socket joint 41-7080 or 41-7081 and to take coupling head 41-7084 or 41-7085.
- C** 41-7084 Coupling Head, to take 1 – 5 flexible arms 41-7105.
- D** 41-7085 Turnable Coupling Head, can be fixed in any position, to take 1 flexible arm 41-7105. If necessary, several coupling heads 41-7085 can be attached.
- 41-7090 Fixation Base, for skull mounting, holding 1 flexible arm 41-7105.
- 41-7091 Fixation Base, for skull mounting, holding 2 flexible arms 41-7105.
- 41-7092 Fixation Base, for mounting two bars up to 16 mm diameter, holding 1 flexible arm 41-7105.
- E** 41-7095 Support only, for flat spatulas, fixing to flexible arm 41-7105.
- F** 41-7096 Support only, for flexible spatulas with round shaft up to 5.5 mm, fixing to flexible arm 41-7105.
- G** 41-7105 Flexible Arm only, for attaching coupling base 41-7184, 41-7085 or 41-7086.
- H** Heifetz flexible Spatula, round shaft, 15.5 cm: 41-7120, 41-7122, 41-7124, 41-7126
- I** Heifetz flexible Spatula, 20 cm: 41-7130, 41-7131, 41-7132, 41-7133, 41-7134, 41-7135

Flexible Arm Retractor



A 41-7080 Ball- and Socket Joint, for fixing holding rod 41-7083 to pole of operating table 10 x 25 mm.



B 41-7083 Holding Rod, for fixation in ball- and socket joint 41-7080 and to take coupling head 41-7084 or 41-7085.



C 41-7084 Coupling Head, to take 1 – 5 flexible arms 41-7105.

D 41-7085 Turnable Coupling Head, can be fixed in any position, to take 1 flexible arm 41-7105. If necessary, several coupling heads 41-7085 can be attached. (not illustrated)



41-7090



41-7091



41-7092

41-7090 Fixation Base, for skull mounting, holding 1 flexible arm 41-7105.

41-7091 Fixation Base, for skull mounting, holding 2 flexible arms 41-7105.

41-7092 Fixation Base, for mounting two bars up to 16 mm diameter. holding 1 flexible arm 41-7105.



E 41-7095 Support only, for flat spatulas, fixing to flexible arm 41-7105.



F 41-7096 Support only, for flexible spatulas with round shaft up to 5.5 mm, fixing to flexible arm 41-7105.



G 41-7105 Flexible Arm only, for attaching coupling base 41-7184, 41-7085 or 41-7086.

41-7122 (11 mm)



H Heifetz
flexible Spatula, round shaft, 155 mm

Art.-No.	width mm
41-7120	8
41-7122	11
41-7124	14
41-7126	17

41-7130 (7 + 8 mm)



I Mod. Aachen
flexible Spatula, 200 mm

Art.-No.	width mm
41-7130	7 + 8
41-7131	10 + 11
41-7132	13 + 14
41-7133	16 + 17
41-7134	19 + 20
41-7135	22 + 25

Hand-held Retractors



Obwegeser

Soft Tissue Retractor

30-0215 22.5 cm 80 x 16 mm



Hess

Nerve Root Retractor

30-0265 17.5 cm 3 mm

30-0266 17.5 cm 5 mm

30-0267 17.5 cm 7 mm



Love

Nerve Root Retractor

30-0260 19 cm 0°

30-0261 19 cm 45°

30-0262 19 cm 90°



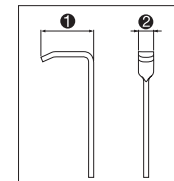
Caspar-type

Nerve Root Retractor

41-6020 24.5 cm 6 mm

41-6022 24.5 cm 8 mm

41-6024 24.5 cm 10 mm



① first number
= depth/length

② second number
= width



Langenbeck
Retractor
21 cm



30-0009
20 x 7 mm
0



30-0010
30 x 11 mm
1



30-0011
30 x 14 mm
2



30-0012
30 x 16 mm
3



30-0013
33 x 14 mm
4



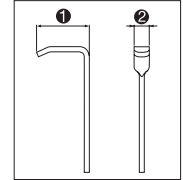
30-0014
40 x 11 mm
5



30-0015
42 x 13 mm
6



30-0016
50 x 11 mm
7



- ❶ first number
= depth/length
- ❷ second number
= width

Hand-held Retractors



30-0019
25 x 6 mm
1



30-0020
25 x 8 mm
2



30-0021
35 x 8 mm
3



30-0022
35 x 11 mm
4



30-0023
35 x 15 mm
5



30-0024
40 x 11 mm # 6



30-0025
55 x 11 mm
7



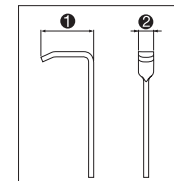
30-0026
70 x 14 mm
8



30-0027
80 x 12 mm
9



30-0028
80 x 16 mm
10



- ❶ first number
= depth/length
- ❷ second number
= width

Kocher-Langenbeck

Retractor
21.5 cm



17 x 8 mm

13 x 10 mm

Lukens

30-0190
17 cm



8 x 9 mm

13 x 10 mm

Jackson

30-0191
17 cm



12 x 12 mm

21 x 6 mm

Cope

30-0192
16 cm

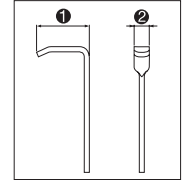


8 x 4 mm

15 x 5.5 mm

Ragnell-Davis

30-0170
14 cm



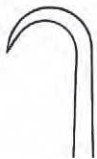
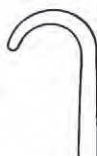
- ❶ first number
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- ❷ second number
= width

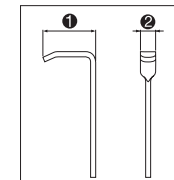
Hand-held Retractors



Volkman

22 cm

		9 x 8 mm	9 x 13 mm	9 x 19 mm	9 x 29 mm	9 x 40 mm
sharp						
	30-1510	30-1511	30-1512	30-1513	30-1514	30-1515
blunt						
	30-1530	30-1531	30-1532	30-1533	30-1534	30-1535
semi-blunt						
	30-1520	30-1521	30-1522	30-1523	30-1524	30-1525



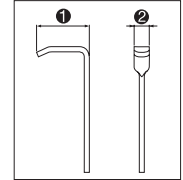
- ❶ first number
= depth/length
- ❷ second number
= width



Kocher

22 cm

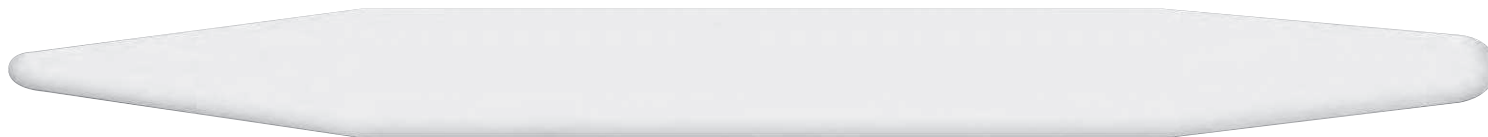
		15 x 10 mm	15 x 15 mm	15 x 20 mm	15 x 30 mm	15 x 40 mm
sharp						
	30-1540	30-1541	30-1542	30-1543	30-1544	30-1545
blunt						
	30-1560	30-1561	30-1562	30-1563	30-1564	30-1565
semi-blunt						
	30-1550	30-1551	30-1552	30-1553	30-1554	30-1555



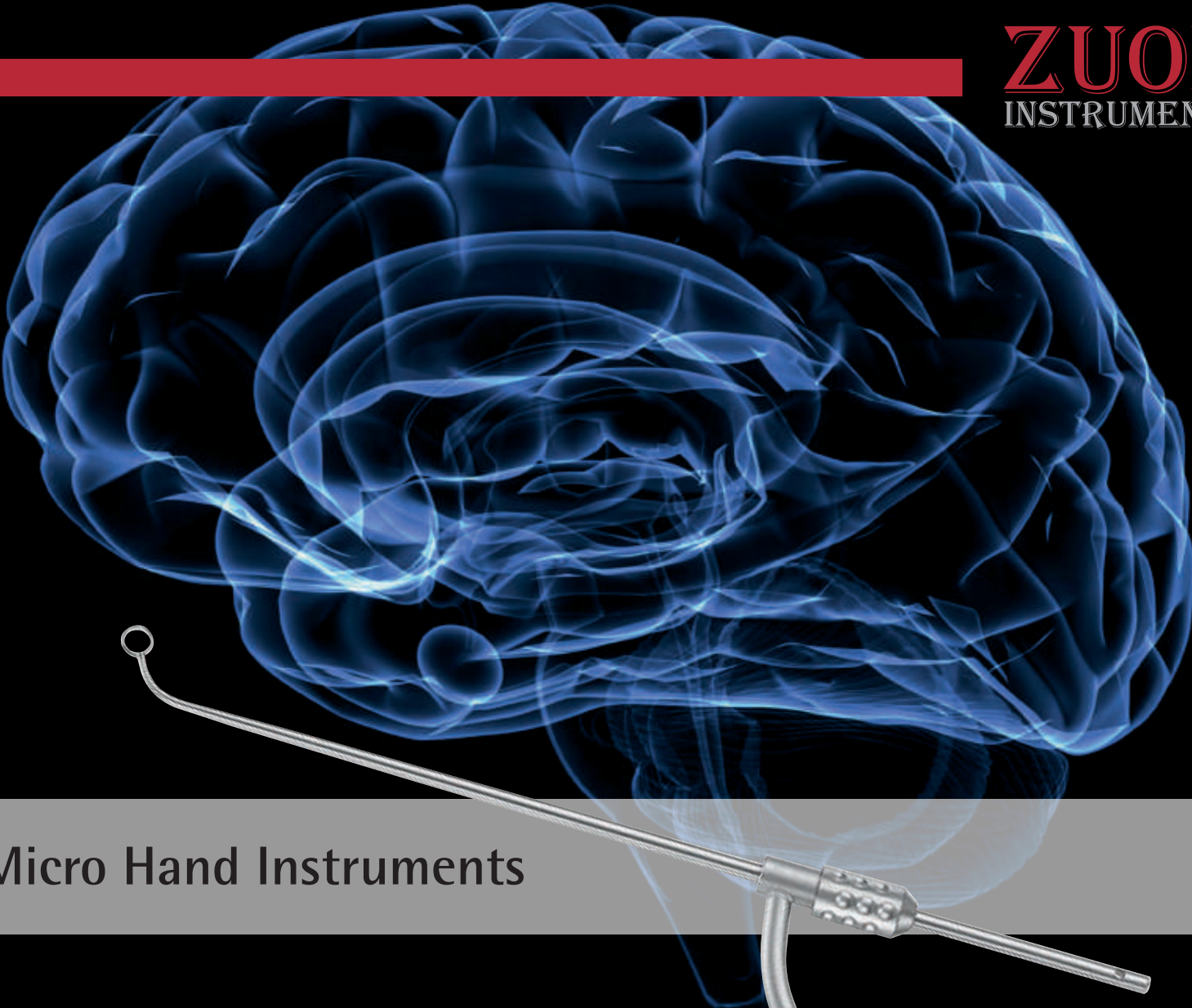
- ❶ first number
= depth/length
- ❷ second number
= width

Conic Spatulas with Memory

The tips of our nitinol spatulas can at normal OR temperatures be individually deformed with soft pressure to the surgeon's needs. Due to the special characteristics of the shape memory metal the 20cm long spatulas with two conical ends will regain their initial straight shape with each autoclaving cycle.



Art.-No.	Tips	length	width
41-7310	6 mm / 2 mm	20 cm	10 mm
41-7311	8 mm / 2 mm	20 cm	15 mm
41-7312	10 mm / 5 mm	20 cm	15 mm
41-7313	10 mm / 5 mm	20 cm	20 mm

A blue, translucent 3D rendering of a human brain is shown against a black background. A surgical instrument, likely a micro hand instrument, is positioned in the lower left foreground, angled towards the brain. The instrument has a long, thin shaft with a small loop at the tip and a handle with a textured grip. The brain is depicted with detailed gyri and sulci, giving it a realistic but ethereal appearance.

Micro Hand Instruments

Rhoton-type



Set with container

Titanium 41-6310 consisting of each pieces 41-6290 until 41-6308

Stainless 41-6030 consisting of each pieces 41-6031 until 41-6048L

41-6049 Container (without content)

Rhoton-type



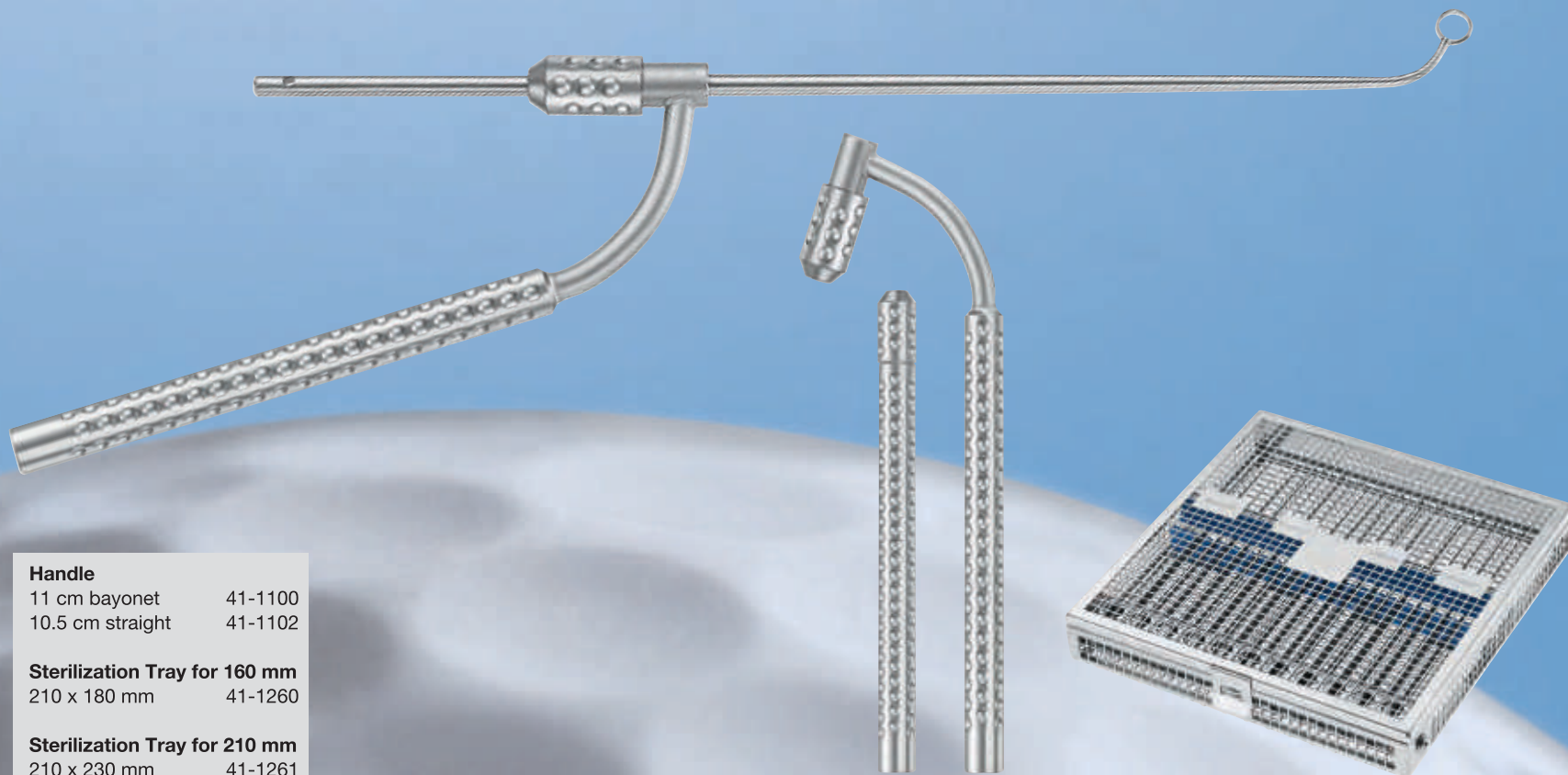
	blade 1.0 mm Dissectors	blade 2.0 mm	blade 3.0 mm	curved	angled	small	medium	large	semi-sharp	blunt
Titanium	41-6290	41-6291	41-6292	41-6293	41-6294	41-6295	41-6296	41-6297	41-6298	41-6299
Stainless	41-6031	41-6032	41-6033	41-6034	41-6035	41-6036	41-6037	41-6038	41-6039	41-6040



	semi-sharp 45° Hook	straight Needle	straight Curettes	angled	3 mm, 90° Ball Dissectors	0° straight	5 mm, 90°	4 mm, 40°	8 mm, 40°
Titanium	41-6300	41-6301	41-6302	41-6303	41-6304	41-6305	41-6306	41-6307	41-6308
Stainless	41-6041	41-6042	41-6043	41-6044	41-6045	41-6046	41-6047	41-6048	41-6048L

Fairgrip™ Cranial Shaft Instruments

Without compromising microscope vision, the bayonet design and the unique “golfball”-style knurling allows to reach deep into narrow locations with a secure but relaxed grip and with highly precise fingertip control. Perfect balance and ergonomic design in combination with multi-directionally adjustable tip inserts minimizes fatigue and largely avoids physiological tremor. A wide selection of tip inserts are available in 16cm or 21cm versions.



Handle

11 cm bayonet	41-1100
10.5 cm straight	41-1102

Sterilization Tray for 160 mm

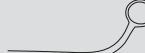
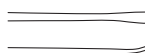
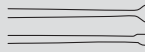
210 x 180 mm	41-1260
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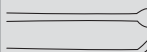
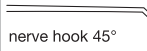
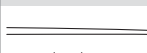
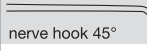
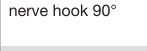
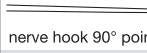
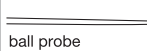
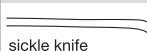
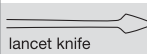
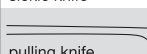
Sterilization Tray for 210 mm

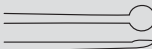
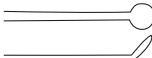
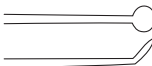
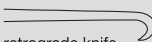
210 x 230 mm	41-1261
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Fairgrip™ Cranial Shaft Instruments



Inserts Ø 3 mm		160 mm	210 mm
	2 mm	41-1110	41-1200
	4 mm	41-1111	41-1201
	6 mm	41-1112	41-1202
	2 mm	41-1113	41-1203
	4 mm	41-1114	41-1204
	6 mm	41-1115	41-1205
	2 mm	41-1116	41-1206
	4 mm	41-1117	41-1207
	6 mm	41-1118	41-1208
	2 mm	41-1146	41-1233
	4 mm	41-1147	41-1234
	6 mm	41-1148	41-1235
	2 mm	41-1149	41-1236
	4 mm	41-1150	41-1237
	6 mm	41-1151	41-1238
	1 mm	41-1120	41-1209
	2 mm	41-1121	41-1210
	3 mm	41-1122	41-1211
	1 mm	41-1123	41-1212
	1.5 mm	41-1128	41-1217
	2 mm	41-1124	41-1213
	3 mm	41-1125	41-1214
	4 mm	41-1126	41-1215
	4 mm	41-1127	41-1216
	2 mm	41-1129	41-1218
	3 mm	41-1130	41-1219
	4 mm	41-1131	41-1220

Inserts Ø 3 mm		160 mm	210 mm
	2 mm	41-1132	41-1221
	3 mm	41-1133	41-1222
	4 mm	41-1134	41-1223
	1 x 2 mm	41-1165	41-1250
	1 x 4 mm	41-1166	41-1251
	1 x 2 mm	41-1137	41-1224
	1 x 3 mm	41-1138	41-1225
	1 x 4 mm	41-1142	41-1229
	1 x 5 mm	41-1140	41-1227
	1 x 8 mm	41-1141	41-1228
	0.4 x 2 mm	41-1143	41-1230
	0.4 x 3 mm	41-1144	41-1231
	1 x 3 mm	41-1153	41-1252
	1 x 3 mm	41-1145	41-1232
	1 x 5 mm	41-1154	41-1239
	1 x 8 mm	41-1155	41-1240
	1 x 5 mm	41-1156	41-1241
	3 mm	41-1161	41-1246
		41-1160	41-1245
	1 mm	41-1157	41-1242
		41-1158	41-1243
		41-1159	41-1244
	3,5 mm	41-1139	41-1226

Inserts Ø 3 mm		160 mm	210 mm
	4 mm	41-1162	41-1247
disc knife			
	2 mm	41-1163	41-1248
	4 mm	41-1164	41-1249
disc knife 45°			
		41-1167	—
micro knife			
	2 mm	41-1168	—
	4 mm	41-1169	—
disc dissector blunt 45°			
	4 mm	41-1175	—
	5 mm	41-1176	—
retrograde knife			



Handle with chuck
41-6159
10.5 cm

Vessel Knife Tip
41-6151
9.5 cm

Vessel Hook Tip
41-6156
8.5 cm



Tissue Pick
41-6268
18.5 cm, 1.0 mm

41-6269
18.5 cm, 1.8 mm



Vessel Spreader
41-6270
16 cm

Vessel Dilators
41-6271
12.5 cm

41-6272
12.5 cm

41-6273
12.5 cm

Probes with ball
41-6275
18.5 cm

41-6277
18.5 cm

Micro Hand Instruments



Blade Holders

for scalpel blades

41-6019 21 cm

for micro blades

41-6012 21 cm

41-6014 25 cm

– blades see page 210 –



Exploration Hooks, 24.5 cm

41-6070

41-6072

41-6074

41-6076

Insulated Hooks, 24.5 cm

41-6071

41-6073

41-6075

41-6077



Ligature Hooks, 18.5 cm

41-6080

41-6081

41-6082

41-6083

Nerve Hooks, 18.5 cm

41-6090

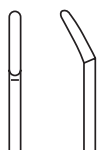
41-6091

Vessel Hooks, 18.5 cm

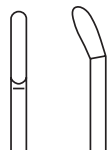
41-6092

41-6093

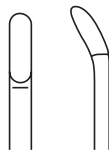
Tumor Knives



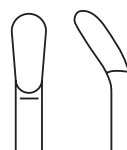
1.0 mm
41-6170 20 cm
41-6180 23 cm



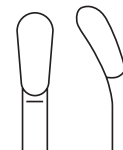
1.5 mm
41-6171 20 cm
41-6181 23 cm



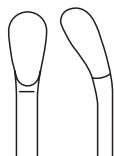
2.0 mm
41-6172 20 cm
41-6182 23 cm



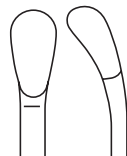
2.5 mm
41-6173 20 cm
41-6183 23 cm



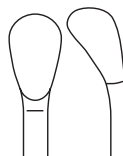
3.0 mm
41-6174 20 cm
41-6184 23 cm



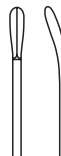
3.5 mm
41-6175 20 cm
41-6185 23 cm



4.0 mm
41-6176 20 cm
41-6186 23 cm



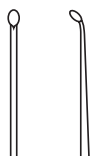
5.0 mm
41-6177 20 cm
41-6187 23 cm



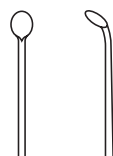
1.8 mm
41-6200 23 cm
Lancet type



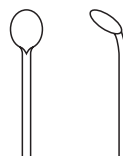
2.5 mm
41-6201 23 cm
Lancet type



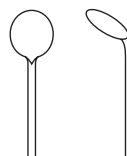
1.5 mm
41-6190 20 cm
41-6195 23 cm



3.0 mm
41-6191 20 cm
41-6196 23 cm

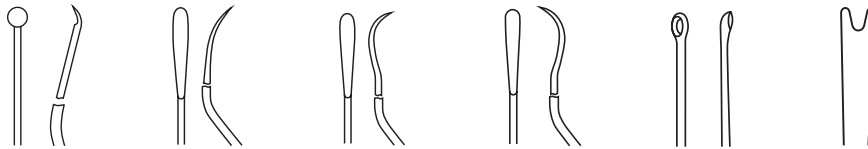


4.5 mm
41-6192 20 cm
41-6197 23 cm



6.0 mm
41-6193 20 cm
41-6198 23 cm

Bayonet Micro Hand Instruments



Raspatories

41-6110
23 cm

41-6111
18.5 cm

41-6112
18.5 cm

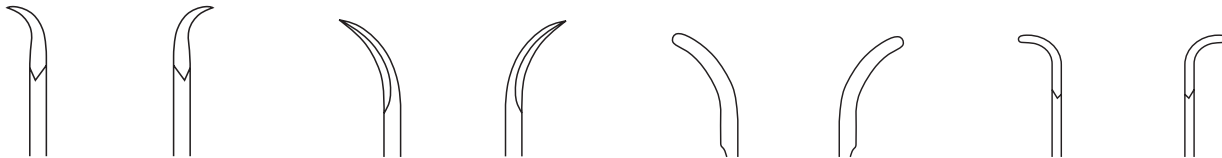
41-6113
18.5 cm

Sharp Scoop

41-6127
18.5 cm

Suture Pusher

41-6265
23 cm



Vessel Knives, 18.5 cm

up
41-6160

down
41-6161

up
41-6162

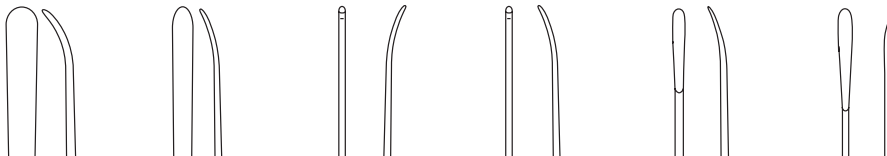
down
41-6163

up
41-6164

down
41-6165

up
41-6166

down
41-6167



Dissectors, blunt

4.5 mm
41-6230
23 cm

2.0 mm
41-6232
23 cm

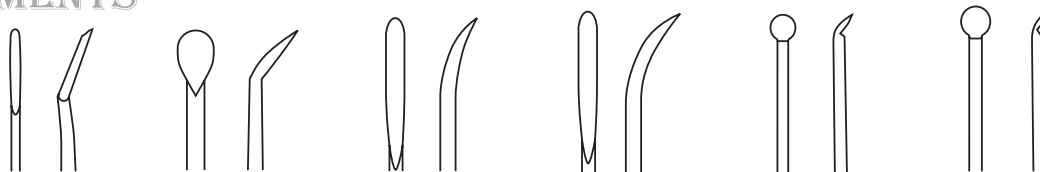
1.0 mm
41-6234
21 cm

1.0 mm
41-6236
21 cm

2.0 mm
41-6238
23 cm

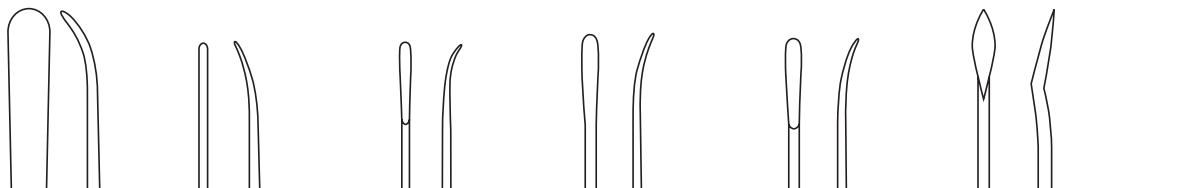
2.0 mm
41-6240
23 cm

Micro Hand Instruments



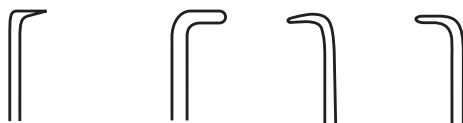
Yasargil-type Raspatories

41-6100	41-6101	41-6102	41-6103	41-6104	41-6105
18.5 cm	18.5 cm	18.5 cm	18.5 cm	21 cm	23 cm



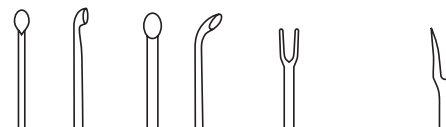
Caspar-type Dissectors

4.5 mm	1.0 mm	1.4 mm	2.0 mm	1.7 mm	sharp	Vessel Knife
41-6210	41-6212	41-6214	41-6216	41-6218	41-6224	41-6145
23 cm	20 cm	23 cm	23 cm	23 cm	18.5 cm	18.5 cm



Fisch Micro Hooks

sharp	blunt	sharp	sharp
		90° curved	90° angled
41-6140	41-6141	41-6142	41-6143
23 cm	23 cm	18.5 cm	18.5 cm, 90°



Sharp Scoops

41-6120	41-6121
23 cm	23 cm

Suture Pusher

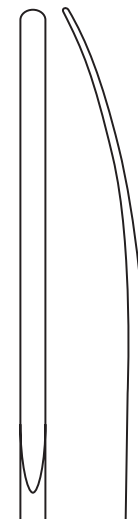
41-6260
18.5 cm

Tumor Fork

23 cm	
41-6250	3 mm
41-6251	4 mm
41-6252	5 mm
41-6253	8 mm

Long Dissector

3 mm blunt	
41-6220	18.5 cm
41-6222	21.5 cm



Bayonet Micro Hand Instruments



Hardy Dissectors

24.5 cm 41-8030
blunt right

41-8031
blunt left

41-8034
sharp right

41-8035
sharp left

Hardy-Fahlbusch (small-tip)

41-8039
sharp



Hardy Dissectors

24.5 cm 41-8032
blunt right

41-8033
blunt left

41-8036
sharp right

41-8037
sharp left

Hardy-Fahlbusch (small-tip)

41-8040
sharp



Landolt Malleable Dissectors

26 cm 41-8050
blunt right

41-8051
blunt left

Landolt Malleable Dissectors

26 cm 41-8052
blunt right

41-8053
blunt left



Landolt



**Curettes
(malleable)**

26 cm
41-8054



26 cm
41-8055



**Blunt Hook
(malleable)**

26 cm
41-8056

Hosobuchi



Fork Spatula

26 cm, rigid
41-8057

Landolt-Reulen



**Raspatories
(rigid)**

26 cm, 2.2 mm
41-8072



**Curette
(rigid)**

26 cm, 3.2 mm
41-8073



26 cm, 2.5 mm
41-8074

Landolt-Reulen



Blunt Hook

26 cm, rigid, 1.7 mm
41-8075



Dissector

26 cm, rigid, 2 mm
41-8076

Fahlbusch



Scoop

26 cm, malleable
41-8070



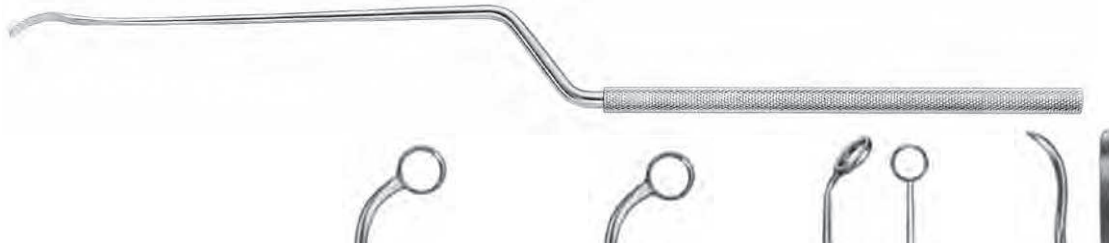
Curette

26 cm, malleable, 2.5 mm
41-8071

Hardy Implant Fork

24.5 cm
41-8038

**Hardy Curettes**
 26 cm, ø 4 mm
 Curettes (malleable)
 41-8041

 26 cm, ø 6 mm
 41-8042
**Nicola Curettes/Raspatory**
 21.5 cm, ø 6.5 mm
 cutting right
 Curettes (malleable)
 41-8020

 21.5 cm, ø 6.5 mm
 cutting left
 41-8021

 21.5 cm, ø 6.5 mm
 41-8022

 21.5 cm
 Raspatory
 41-8023
**Ray Pituitary Curette**
 18 cm, ø 4 mm
 horizontal 45°
 41-8010

 18 cm, ø 4 mm
 vertical 45°
 41-8011



Smithwick

30-0310 30-0311
17 cm 21 cm



Smithwick

30-0270
29 cm



Hoen

30-0275
22 cm/11 mm



Dandy

30-0280
22 cm/4 mm



Dandy

30-0281
22 cm/4 mm



Dandy

30-0282
22 cm/4 mm



Ligature
Needle

Adson

30-0283
23 cm



Graham

30-0284
16.5 cm



sharp

Sachs

30-0285
18.5 cm



Crile

30-0299
14.5 cm/7 mm



Crile

30-0300
20 cm/7 mm



5 mm



7 mm

Cushing

30-0304 30-0305
19 cm/5 mm 19 cm/7 mm

30-0306 30-0307
28 cm/5 mm 28 cm/7 mm



Blalock

30-0301
24 cm



PBI

41-1053
19 cm



PBI

41-1015
19 cm

with ball



Adson

30-0315
20 cm



sharp



Adson

30-0316
20 cm



blunt



Sachs

30-0312
21 cm



sharp



Kleinert-Kutz

30-0326 30-0327 30-0328
16 cm S 16 cm M 16 cm L



Gillies

30-0317 30-0318
18 cm S 18 cm L



Frazier

30-0320
13 cm



Hartmann

30-0314
16 cm



Kilner

30-0313
15 cm



Watson-Cheyne
28-0030
18 cm



#1
28-0041
17.5 cm



Penfield



#2
28-0042
19.5 cm



#3
28-0043
19.5 cm



#4
28-0044
20.5 cm



#5
28-0045
29 cm





small
28-0035
24 cm

wide
28-0036
24 cm

Toennis
Dissector



sharp

28-0071
18.5 cm



blunt

Freer
Elevator



sharp

28-0072
20 cm



blunt

Elevator



28-0010
24.5 cm
sharp / blunt

Davis
Dissector



small
28-0080
18.5 cm
28-0082
24 cm

wide
28-0084
19.5 cm
28-0086
24 cm

Olivecrona
Dissector



28-0065
18.5 cm/3 mm

28-0066
21.5 cm/3 mm

Micro Dissector



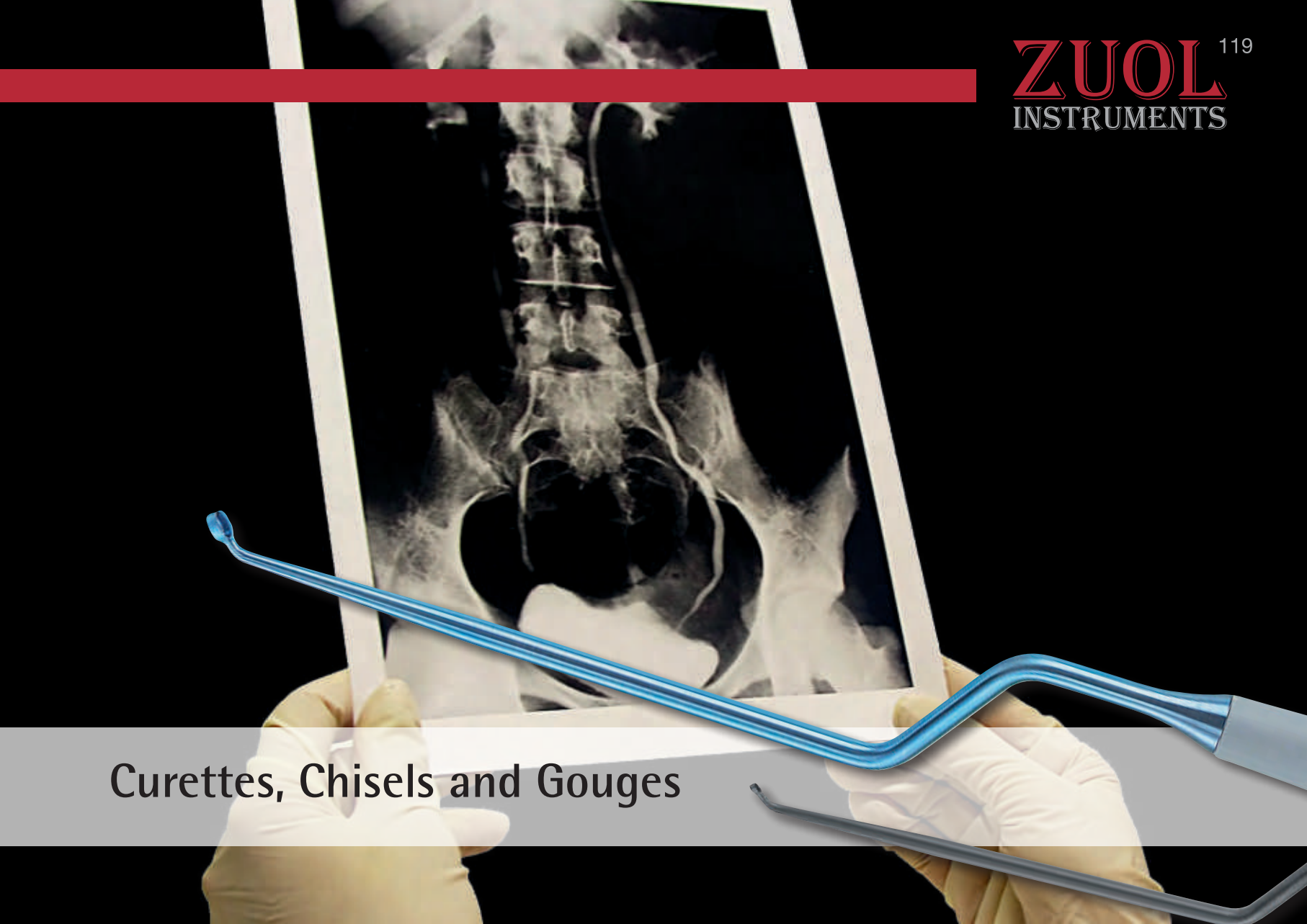
28-0020
18 cm

Mc Donald
Dissector



28-0180
16.5 cm, 17 mm/5 mm

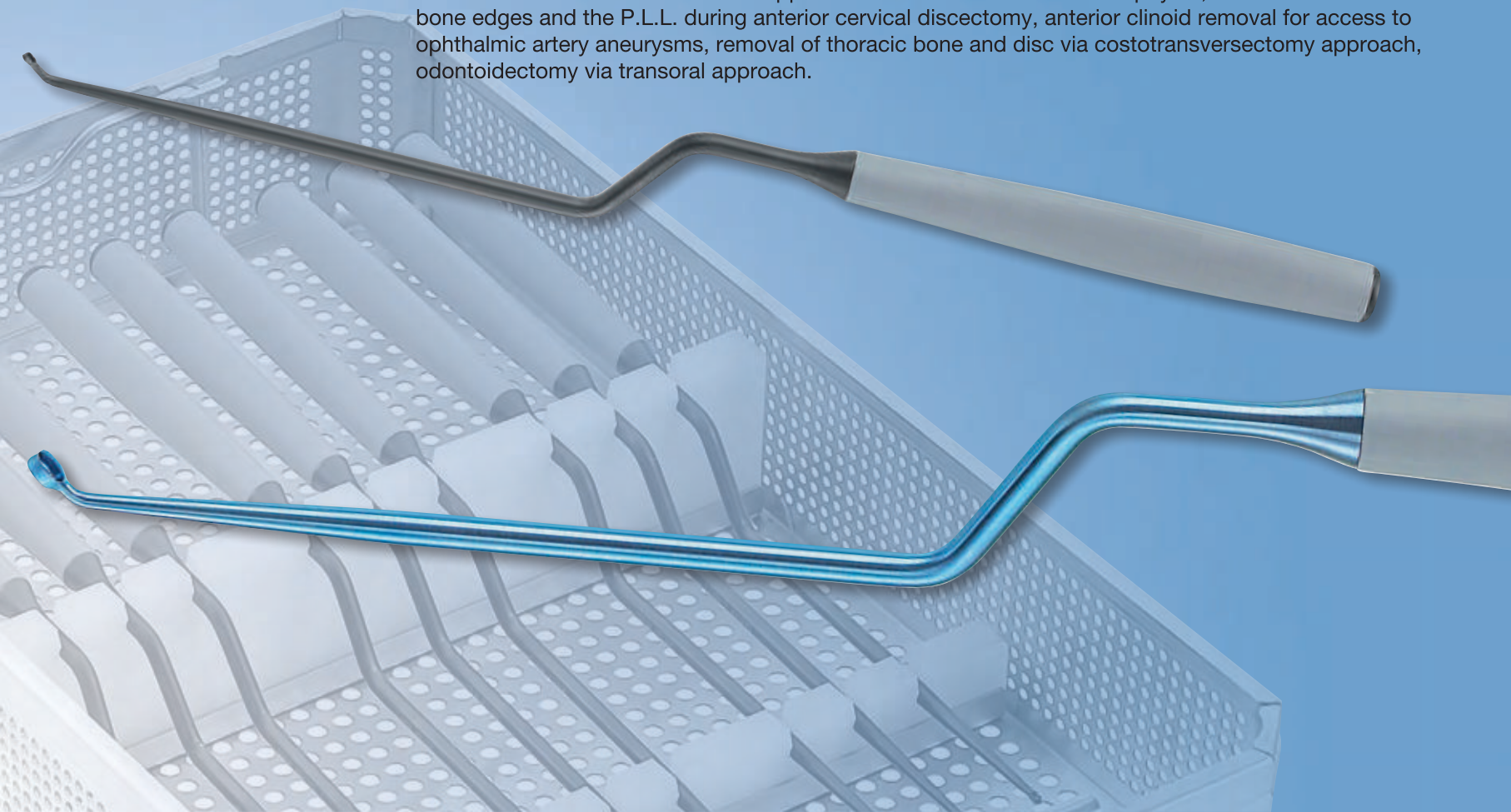
Dorsey
Dura Separator



Curettes, Chisels and Gouges

TriCuret™ Spinal Curettes

A unique trio of materials with Radel® PPSU (polyphensulfone) handles, over-moulded with grey silicone rubber and with a choice of a black ceramic coated stainless steel or non-magnetic titanium working end for micro osseous dissection, microsurgical removal of bony, calcified or other firm tissues. Possible clinical applications include removal of osteophytes, bone edges and the P.L.L. during anterior cervical discectomy, anterior clinoid removal for access to ophthalmic artery aneurysms, removal of thoracic bone and disc via costotransversectomy approach, odontoidectomy via transoral approach.



TriCuret™ Spinal Curettes

- Innovative design
- Maximum comfort and superb grip
- Approx. 40gm lighter than conventional curettes
- Bayonet shaped design with straight, angled forward or backwards tips
- Withstands even most demanding sterilization environments



2 mm

40-4000

40-4000.TI



3 mm

40-4001

40-4001.TI



4 mm

40-4002

40-4002.TI



2 mm

40-4020

40-4020.TI



3 mm

40-4021

40-4021.TI



4 mm

40-4022

40-4022.TI



2 mm

40-4010

40-4010.TI



3 mm

40-4011

40-4011.TI



4 mm

40-4012

40-4012.TI



40-4030 Sterilization Tray (stainless steel) for up to 9 TriCuret™ curettes (stainless steel/titanium), with handle, stackable, 405 mm x 253 mm x 70mm (without content)

Fairgrip™ Bayonet Style Curette**Fairgrip™**

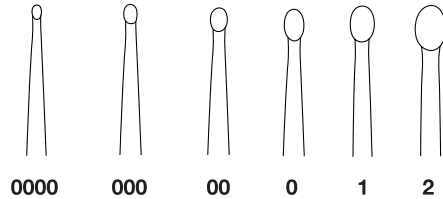
Get in touch with FAIRGRIP™ !

Unmatched feel and control are brought from the fairway to your OR. The FAIRGRIP™ ergonomic instrument handles with a new dimple knurling similar to the design of golfballs offer a completely new experience of precision, sensitivity and control and help to reduce fatigue.

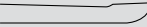
- Specifically designed for microdissection procedures
- Ergonomic Fairgrip™ golfball handle design with round corners for easy rotation and flat sides for controlled torque
- Increased field visualization
- Stable and controlled power leverage
- Great precision and maximum control
- Multiple tip geometries available



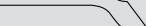
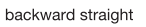
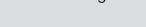
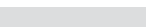
Curette Dimension Chart (Actual Size Shown)



40-7700 Cervical Set (small anatomy)

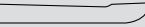
	40-7701	21 cm, 0, 3 x 5 mm
	40-7702	21 cm, 00, 2.5 x 4 mm
	40-7703	21 cm, 000, 2 x 3.3 mm
	40-7704	21 cm, 0000, 1.7 x 3 mm
	40-7706	21 cm, 0, 3 x 5 mm
	40-7707	21 cm, 00, 2.5 x 4 mm
	40-7708	21 cm, 000, 2 x 3.3 mm
	40-7709	21 cm, 0000, 1.7 x 3 mm
	40-7711	21 cm, 0, 3 x 5 mm
	40-7712	21 cm, 00, 2.5 x 4 mm
	40-7713	21 cm, 000, 2 x 3.3 mm
	40-7714	21 cm, 0000, 1.7 x 3 mm
	40-7716	21 cm, 0, 3 x 5 mm
	40-7717	21 cm, 00, 2.5 x 4 mm
	40-7718	21 cm, 000, 2 x 3.3 mm
	40-7719	21 cm, 0000, 1.7 x 3 mm
	40-7721	21 cm, Micro Nerve Hook
	40-7722	21 cm, Ultra Micro Nerve Hook
	40-7723	21 cm, Bone Waxer

40-7760 Lumbar Long Set (larger anatomy)

	40-7761	24 cm, 0
	40-7762	24 cm, 1
	40-7763	24 cm, 2
	40-7764	24 cm, 0
	40-7765	24 cm, 1
	40-7766	24 cm, 2
	40-7767	24 cm, 0
	40-7768	24 cm, 1
	40-7769	24 cm, 2
	40-7770	24 cm, 0
	40-7771	24 cm, 1
	40-7772	24 cm, 2
	40-7773	24 cm, 0
	40-7774	24 cm, 1
	40-7775	24 cm, 2
	40-7776	24 cm, 0
	40-7777	24 cm, 1
	40-7778	24 cm, 2
	40-7779	24 cm, Penfield #1
	40-7780	24 cm, Penfield #2
	40-7781	24 cm, Nerve Hook
	40-7782	24 cm, Penfield #4
	40-7793	24 cm, Bone Waxer
	40-7794	24 cm, Spine Probe

40-7799 Sterilization Tray for 12 Long Currettes, 21 and 24 cm length, 405 x 253 x 70 mm

40-7730 Cervical Long Set (small anatomy)

	40-7731	24 cm, 0, 3 x 5 mm
	40-7732	24 cm, 00, 2.5 x 4 mm
	40-7733	24 cm, 000, 2 x 3.3 mm
	40-7734	24 cm, 0000, 1.7 x 3 mm
	40-7736	24 cm, 0, 3 x 5 mm
	40-7737	24 cm, 00, 2.5 x 4 mm
	40-7738	24 cm, 000, 2 x 3.3 mm
	40-7739	24 cm, 0000, 1.7 x 3 mm
	40-7741	24 cm, 0, 3 x 5 mm
	40-7742	24 cm, 00, 2.5 x 4 mm
	40-7743	24 cm, 000, 2 x 3.3 mm
	40-7744	24 cm, 0000, 1.7 x 3 mm
	40-7746	24 cm, 0, 3 x 5 mm
	40-7747	24 cm, 00, 2.5 x 4 mm
	40-7748	24 cm, 000, 2 x 3.3 mm
	40-7749	24 cm, 0000, 1.7 x 3 mm
	40-7751	24 cm, Micro Nerve Hook
	40-7752	24 cm, Ultra Micro Nerve Hook
	40-7753	24 cm, Bone Waxer



Epstein

40-4270	20 cm	2.0 mm	Fig. 000
40-4271	20 cm	2.5 mm	Fig. 00
40-4272	20 cm	3.0 mm	Fig. 0



Volkmann

black PPMG handle

40-7450	27 cm	4.4 mm	Fig. 00
40-7451	27 cm	6.8 mm	Fig. 1
40-7452	27 cm	8.5 mm	Fig. 2
40-7453	27 cm	10.0 mm	Fig. 3
40-7460.02	43 cm	2.0 mm	
40-7460.04	43 cm	4.0 mm	
40-7460.06	43 cm	6.0 mm	



Bruns

40-4462	17 cm	2.6 mm	Fig. 0000
40-4464	17 cm	3.3 mm	Fig. 000
40-4466	17 cm	4.8 mm	Fig. 00
40-4468	17 cm	5.8 mm	Fig. 0
40-4470	17 cm	7.3 mm	Fig. 1
40-4472	17 cm	8.3 mm	Fig. 2
40-4474	17 cm	10.2 mm	Fig. 3
40-4476	17 cm	11.8 mm	Fig. 4
40-4478	17 cm	12.8 mm	Fig. 5
40-4480	17 cm	14.0 mm	Fig. 6

Hibbs-Spratt (Bruns)



straight

40-4280	23 cm	2.2 mm	Fig. 00000
40-4281	23 cm	2.5 mm	Fig. 0000
40-4282	23 cm	2.8 mm	Fig. 000
40-4283	23 cm	3.3 mm	Fig. 00
40-4284	23 cm	3.7 mm	Fig. 0
40-4285	23 cm	4.3 mm	Fig. 1
40-4286	23 cm	4.8 mm	Fig. 2
40-4287	23 cm	5.6 mm	Fig. 3
40-4288	23 cm	6.1 mm	Fig. 4
40-4289	23 cm	6.7 mm	Fig. 5
40-4290	23 cm	8.7 mm	Fig. 6
40-4291	23 cm	11 mm	Fig. 7



forward angled

40-4300	23 cm	2.2 mm	Fig. 00000
40-4301	23 cm	2.5 mm	Fig. 0000
40-4302	23 cm	2.8 mm	Fig. 000
40-4303	23 cm	3.3 mm	Fig. 00
40-4304	23 cm	3.7 mm	Fig. 0
40-4305	23 cm	4.3 mm	Fig. 1
40-4306	23 cm	4.8 mm	Fig. 2
40-4307	23 cm	5.6 mm	Fig. 3
40-4308	23 cm	6.1 mm	Fig. 4
40-4309	23 cm	6.7 mm	Fig. 5
40-4310	23 cm	8.7 mm	Fig. 6



reverse angled

40-4320	23 cm	2.2 mm	Fig. 00000
40-4321	23 cm	2.5 mm	Fig. 0000
40-4322	23 cm	2.8 mm	Fig. 000
40-4323	23 cm	3.3 mm	Fig. 00
40-4324	23 cm	3.7 mm	Fig. 0
40-4325	23 cm	4.3 mm	Fig. 1
40-4326	23 cm	4.8 mm	Fig. 2
40-4327	23 cm	5.6 mm	Fig. 3
40-4328	23 cm	6.1 mm	Fig. 4
40-4329	23 cm	6.7 mm	Fig. 5
40-4330	23 cm	8.7 mm	Fig. 6



Cobb straight

40-9030	27 cm	3.25 mm	Fig. 00
40-9031	27 cm	4.0 mm	Fig. 0
40-9032	27 cm	5.0 mm	Fig. 1
40-9033	27 cm	6.0 mm	Fig. 2
40-9034	27 cm	7.5 mm	Fig. 3
40-9035	27 cm	9.0 mm	Fig. 4
40-9036	27 cm	11.5 mm	Fig. 5
40-9037	27 cm	13.0 mm	Fig. 6



Cobb forward angled

40-9040	27 cm	3.25 mm	Fig. 00
40-9041	27 cm	4.0 mm	Fig. 0
40-9042	27 cm	5.0 mm	Fig. 1
40-9043	27 cm	6.0 mm	Fig. 2
40-9044	27 cm	7.5 mm	Fig. 3
40-9045	27 cm	9.0 mm	Fig. 4
40-9046	27 cm	11.5 mm	Fig. 5
40-9047	27 cm	13.0 mm	Fig. 6



Cobb reverse angled

40-9050	27 cm	3.25 mm	Fig. 00
40-9051	27 cm	4.0 mm	Fig. 0
40-9052	27 cm	5.0 mm	Fig. 1
40-9053	27 cm	6.0 mm	Fig. 2
40-9054	27 cm	7.5 mm	Fig. 3
40-9055	27 cm	9.0 mm	Fig. 4
40-9056	27 cm	11.5 mm	Fig. 5
40-9057	27 cm	13.0 mm	Fig. 6

**Key**

40-8510	19 cm	6 mm
40-8512	19 cm	12 mm
40-8514	19 cm	19 mm
40-8516	19 cm	25 mm

**Langenbeck**

40-8280 20 cm 8 mm

**Langenbeck**

40-8285 20 cm 18 mm

**Cushing**
Little Joker

40-8281 19 cm 6 mm



Cushing

40-8290
19 cm 15 mm



Cushing

40-8291
19 cm 15 mm



black
PPMG handle
40-8613
19 cm 6 mm



Adson

40-8390
17 cm 8 mm



Adson

40-8392
17 cm 7 mm



Adson

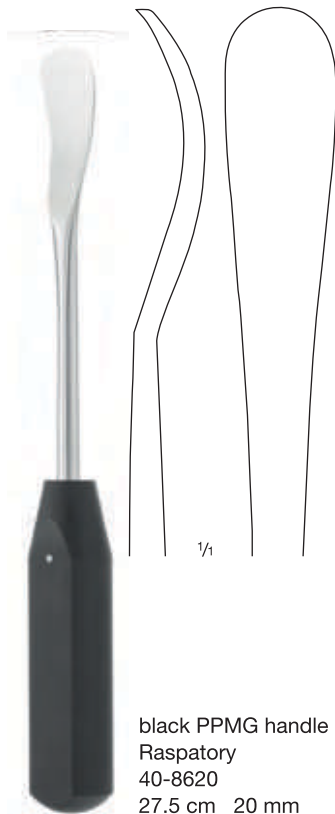
40-8393
17 cm 7 mm



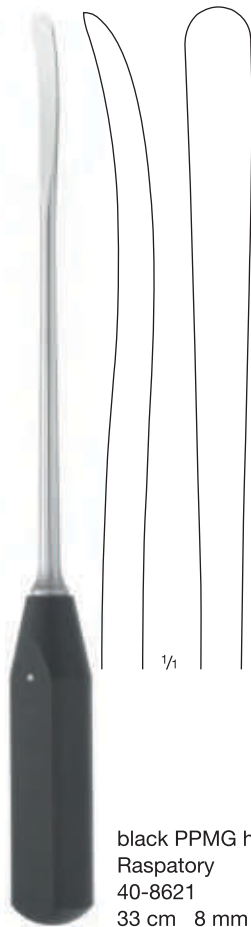
Adson
Raspatory
blunt
40-8391
17 cm 7 mm



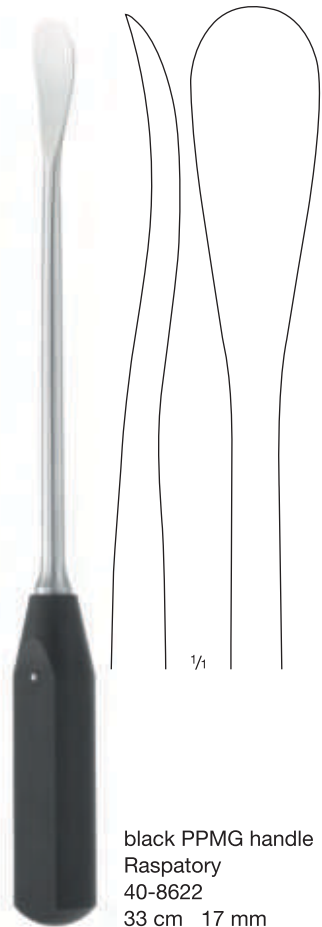
Cobb
Elevator
41-9001 28 cm 8 mm
41-9003 28 cm 10 mm
41-9005 28 cm 13 mm
41-9006 28 cm 19 mm
41-9007 28 cm 25 mm
41-9008 28 cm 32 mm



black PPMG handle
Raspatory
40-8620
27.5 cm 20 mm



black PPMG handle
Raspatory
40-8621
33 cm 8 mm



black PPMG handle
Raspatory
40-8622
33 cm 17 mm



Cobb

A	40-8070	28 cm	7 mm
B	40-8071	28 cm	7 mm
C	40-8072	28 cm	7 mm
D	40-8073	28 cm	7 mm



Zielke

black PPSU handle
Intersomatic Curette
both sides sharp

40-7516.08GD	21 cm	8 mm	straight
40-7516.11GD	21 cm	11 mm	straight
40-7517.08GD	25 cm	8 mm	straight
40-7517.11GD	25 cm	8 mm	straight
40-7519.11GD	35 cm	11 mm	straight



Zielke

black PPSU handle
Intersomatic Curette
both sides sharp

40-7517.08	25 cm	8 mm	angled 45°
40-7517.11	25 cm	11 mm	angled 45°
40-7518.08	30 cm	8 mm	angled 45°
40-7518.11	30 cm	11 mm	angled 45°
40-7519.08	35 cm	8 mm	angled 45°
40-7519.11	35 cm	11 mm	angled 45°
40-7515.06	43 cm	6 mm	angled 45°
40-7515.08	43 cm	8 mm	angled 45°



Smith-Peterson

straight

40-8080	20 cm	6 mm
40-8081	20 cm	9 mm
40-8082	20 cm	13 mm
40-8083	20 cm	16 mm
40-8084	20 cm	19 mm
40-8085	20 cm	25 mm
40-8086	20 cm	32 mm



Smith-Peterson

curved

40-8090	20 cm	6 mm
40-8091	20 cm	9 mm
40-8092	20 cm	13 mm
40-8093	20 cm	16 mm
40-8094	20 cm	19 mm
40-8095	20 cm	25 mm
40-8096	20 cm	32 mm



Lexer

black PPSU handle

40-8459	22 cm	5 mm
40-8460	22 cm	7 mm
40-8461	22 cm	10 mm
40-8462	22 cm	15 mm
40-8463	22 cm	20 mm
40-8464	22 cm	25 mm
40-8465	22 cm	30 mm



Mini-Lexer

black PPSU handle

40-8495	18 cm	4 mm
40-8496	18 cm	6 mm
40-8497	18 cm	8 mm
40-8498	18 cm	10 mm
40-8499	18 cm	12 mm



Lexer

black PPSU handle

40-8449.04	22 cm	4 mm
40-8449	22 cm	5 mm
40-8449.06	22 cm	6 mm
40-8450	22 cm	7 mm
40-8451	22 cm	10 mm
40-8452	22 cm	15 mm
40-8453	22 cm	20 mm
40-8454	22 cm	25 mm
40-8455	22 cm	30 mm



Mini-Lexer

black PPSU handle

40-8490	18 cm	4 mm
40-8491	18 cm	6 mm
40-8492	18 cm	8 mm
40-8493	18 cm	10 mm
40-8494	18 cm	12 mm



Cottle

Chisel flat

40-8220	18.5 cm	4 mm
40-8221	18.5 cm	7 mm
40-8222	18.5 cm	9 mm
40-8223	18.5 cm	12 mm



Lexer

black PPSU handle

40-8480.04	26 cm	4 mm
40-8449.43	43 cm	5 mm
40-8480.06	26 cm	6 mm
40-8480.07	26 cm	7 mm
40-8451.31	31 cm	10 mm
40-8451.37	37 cm	10 mm
40-8451.43	43 cm	10 mm
40-8452.31	31 cm	15 mm
40-8452.37	37 cm	15 mm
40-8454.31	31 cm	25 mm
40-8454.37	37 cm	25 mm



Lambotte

straight

40-8150	25 cm	4 mm
40-8151	25 cm	6 mm
40-8152	25 cm	8 mm
40-8153	25 cm	10 mm
40-8154	25 cm	13 mm
40-8155	25 cm	16 mm
40-8156	25 cm	18 mm
40-8157	25 cm	20 mm
40-8158	25 cm	25 mm
40-8159	25 cm	30 mm
40-8160	25 cm	38 mm
40-8161	25 cm	44 mm
40-8162	25 cm	50 mm



Lambotte

curved

40-8170	25 cm	4 mm
40-8171	25 cm	8 mm
40-8172	25 cm	10 mm
40-8173	25 cm	13 mm
40-8174	25 cm	16 mm
40-8175	25 cm	18 mm
40-8176	25 cm	20 mm
40-8178	25 cm	25 mm
40-8179	25 cm	30 mm
40-8180	25 cm	38 mm



Mini-Lambotte

straight

40-8420	12.5 cm	2 mm
40-8421	12.5 cm	3 mm
40-8422	12.5 cm	4 mm
40-8423	12.5 cm	6 mm
40-8424	12.5 cm	8 mm
40-8425	12.5 cm	10 mm
40-8426	12.5 cm	12 mm
40-8427	12.5 cm	15 mm



Passow

Tampers

40-9901	12 cm	2.5 mm
40-9902	12 cm	3.5 mm



Caspar-type

Tampers

40-9903	20 cm	Ø 3 mm
40-9904	20 cm	Ø 5 mm
40-9905	20 cm	Ø 8 mm
40-9910	20 cm	Ø 12 mm
40-9911	20 cm	Ø 14 mm
40-9912	20 cm	Ø 16 mm
40-9913.04	30 cm	Ø 4 mm
40-9913.07	30 cm	Ø 7 mm



Mallett

40-8941	24.5 cm, 200 g, Ø 30 mm, with interchangeable plastic discs, plastic handle
40-8941.KB	Interchangeable plastic discs Ø 30 mm, 2 pieces



Cottle

40-8910
18.5 cm, 30 mm, 340 gr.



hard-pressed

40-8960
24 cm, 35 mm, 200 gr.



hard-pressed
40-8965

21 cm, 30 mm, 125 gr.



Rees
20 cm



14-1010



14-1015



14-1020

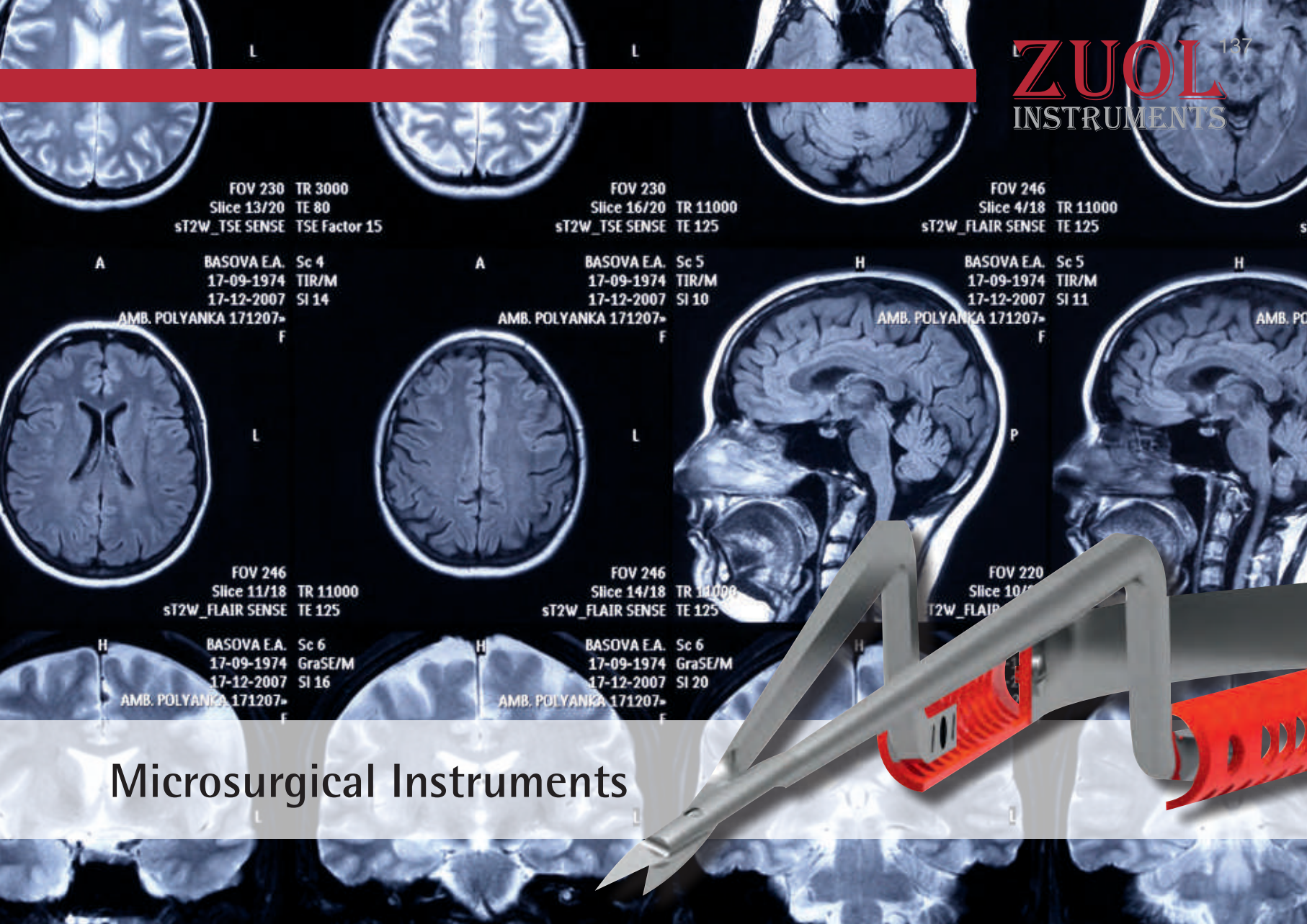


14-1025



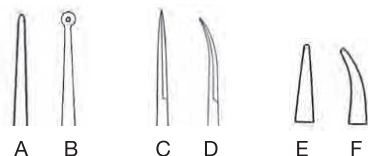
14-1030





Microsurgical Instruments

Rhoton-type Micro Forceps



Rhoton-type, Bayonet Micro Forceps

	A	B
		Ring Tip
Length		
23 cm	10-3390	10-3392
23 cm	10-4390	10-4392 (Titanium)

Rhoton-type, Bayonet Scissors

	C	D
Length		
21 cm	03-1400	03-1401
23 cm	03-1410	03-1411
21 cm	03-4100	03-4101 (Titanium)
23 cm	03-4105	03-4106 (Titanium)

Rhoton-type, Bayonet Needle Holders

	E	F
Length		
21 cm	03-0400	03-0401
23 cm	03-0410	03-0411
21 cm	03-4400	03-4401 (Titanium)
23 cm	03-4410	03-4411 (Titanium)

without ratchet (not illustrated)

21 cm	03-0402	03-0403
23 cm	03-0412	03-0413
21 cm	03-4402	03-4403 (Titanium)
23 cm	03-4412	03-4413 (Titanium)

Rhoton-type Scissors



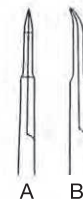
Rhoton-type Needle Holders



Yasargil-type Scissors



Yasargil-type Needle Holders

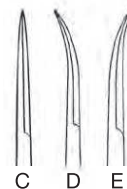


Yasargil-type-Vannas, Bayonet Scissors

	A	B
Length		
22.5 cm	41-4120	41-4121

Yasargil-type, Bayonet Scissors

	C	D	E
Length			
16.5 cm	41-4100	41-4101	
20.0 cm	41-4105	41-4106	41-4107
22.5 cm	41-4115	41-4116	
24.5 cm	41-4125	41-4126	
toothed blade			
22.5 cm	41-4114		



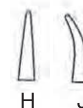
Yasargil-type, Bayonet Dissection Scissors

	F	G
Length		
20.0 cm	41-4110	41-4111
22.5 cm	41-4130	41-4131



Yasargil-type, Bayonet Needle Holders

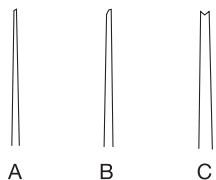
	H	J
Length		
16.5 cm		41-2120
20.0 cm	41-2111	41-2121
22.5 cm	41-2112	41-2122
24.5 cm		41-2123



Bayonet Micro Tissue Forceps

Yasargil-type

0.5 mm 0.9 mm 1 x 2 teeth
1.3 mm



Ø 3 mm Ø 5 mm Ø 7 mm



Ø 3 mm Ø 5 mm



Yasargil-type

Length	A	B	C
16 cm	41-3100	41-3101	
18 cm	41-3103	41-3104	41-3105
20 cm	41-3106	41-3107	
22 cm	41-3110	41-3111	
24 cm	41-3113	41-3114	

Yasargil-type Spoon-shaped jaws

Length	D	E	F
22 cm	41-3120	41-3121	
24 cm	41-3130	41-3131	41-3122

Yasargil-type Flat jaws, serrated

Length	G	H
22 cm	41-3125	41-3126

Yasargil-type

Spoon-shaped jaws, serrated



Yasargil-type

Flat jaws, serrated



Bayonet Micro Tissue Forceps

Yasargil-type

Spoon-shaped jaws, forward



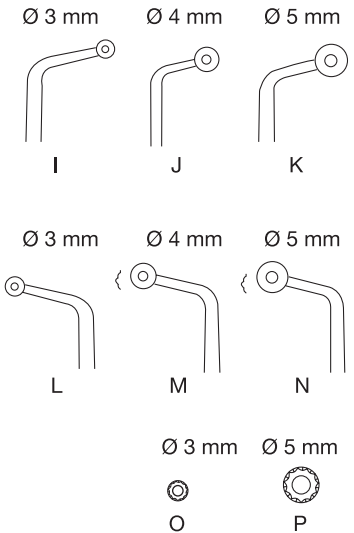
Yasargil-type

Spoon-shaped jaws, reserve



Heifetz

Curette jaws, toothed



Yasargil-type Spoon-shaped jaws, forward

Length	I	J	K
23 cm	41-3140	41-3141	41-3142

Yasargil-type Spoon-shaped jaws, reserve

Length	L	M	N
23 cm	41-3145	41-3146	41-3147

Heifetz Curette-jaws serrated

Length	O	P
22 cm	41-3135	41-3136

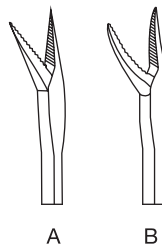
Micro Needle Holder

Rotatable shaft with flushing channel
bayonet shaped, rotatable, 260 mm, WL 120 mm
single action, Sapphire™ jaw, straight

Fig.	Art.-No.	jaw mm
A	41-4400	0,5
A	41-4402	1

curved

Fig.	Art.-No.	jaw mm
B	41-4401	0,5
B	41-4403	1



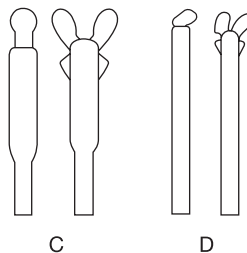
Micro Cupped Forceps

Rotatable shaft with flushing channel
bayonet shaped, rotatable, 260 mm, WL 120 mm
double action, straight

Fig.	Art.-No.	jaw mm
C	41-4410	2
C	41-4414	4

60° angled

Fig.	Art.-No.	jaw
D	41-4411	2



Standard working length 12 cm, for 9 cm WL please add "S" behind article number.
Additional working lengths on request.



Micro Scissors

Rotatable shaft with flushing channel
bayonet shaped, rotatable, 260 mm, WL 120 mm,
single action, straight

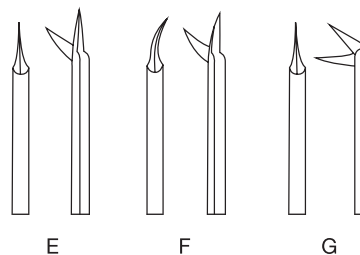
Fig.	Art.-No.	description
E	41-4420	sharp/sharp
E	41-4422	blunt/blunt

curved

Fig.	Art.-No.	description
F	41-4421	sharp/sharp
F	41-4423	blunt/blunt

45° angled

Fig.	Art.-No.	description
G	41-4424	blunt/blunt
G	41-4426	sharp/sharp



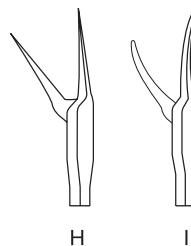
Micro Forceps

Rotatable shaft with flushing channel
bayonet shaped, rotatable, 260 mm, WL 120 mm,
single action, without ratchet, straight

Fig.	Art.-No.	jaw mm
H	41-4430	0,5

curved

Fig.	Art.-No.	jaw
I	41-4431	0,5



Standard working length 12 cm, for 9 cm WL please add "S" behind article number.
Additional working lengths on request.

Structurae™ Bayonet Micro Instruments

Ultra-lightweight Instruments for extremely delicate surgery.

- Totally new look and feel
- Lasting stainless steel framework structure
- Innovative modular construction
- Ergonomic round shell handles with perforations
- ultra-lightweight, comparable to the weight of titanium instruments
- Excellent haptic and unmatched precise control
- Easy cleaning and maintenance
- Nylon color coding

Nylon color coding:

black handle	blue handle	lilac handle	red handle	white handle	yellow handle
XX-XXXX/N	XX-XXXX/B	XX-XXXX/L	XX-XXXX/R	XX-XXXX/W	XX-XXXX/Y

Black + White Special Edition
XX-XXXX/WK

German Colors Special Edition
XX-XXXX/RKG

41-3210

41-2205/N

41-4508/R





41-4507/Y

Micro Tissue Forceps

ultra-lightweight

Art.-No.	length mm	Tip mm
41-3208	200	0,8
41-3209	200	0,4
41-3210*	220	0,8
41-3211	220	0,4
41-3215	240	0,8
41-3216	240	0,4

Tumour Grasping Forceps

ultra-lightweight

Art.-No.	length mm	Tip mm
41-3228	210	2,5
41-3229	210	3,5
41-3230	240	2,5
41-3231	240	3,5

ultra-lightweight, serrated

Art.-No.	length mm	Tip mm
41-3240	210	2,5
41-3241	210	3,5
41-3245	240	2,5
41-3246	240	3,5

* bold = shown

Micro-Needle Holder

ultra-lightweight, straight,
without ratchet, Sapphire™

Art.-No.	length mm	Insert / Tip mm
41-2205*	200	0,4 x 11
41-2207	220	0,4 x 11
41-2210	240	0,4 x 11

ultra-lightweight, curved,
without ratchet, Sapphire™

Art.-No.	length mm	Insert / Tip mm
41-2206	200	0,8
41-2208	220	0,8
41-2211	240	0,8

Micro-Scissors

ultra-lightweight, straight

Art.-No.	length mm
41-4506	200
41-4508*	220
41-4510	240
41-4515	270

ultra-lightweight, curved

Art.-No.	length mm
41-4507*	200
41-4509	220
41-4511	240
41-4516	270

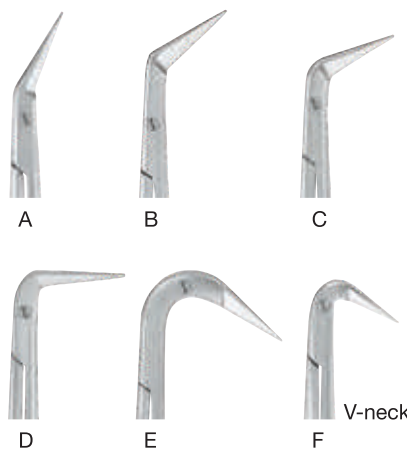


03-1133

03-1133/RKG

03-1133/WK

03-1133/R



Micro Scissors

Fig.	Art.-No.	length mm	angle
A	03-1131	170	25°
B	03-1133*	170	45°
C	03-1135	170	60°
D	03-1137	170	90°
E	03-1139	170	125°
F	03-1139V	170	125°

* **bold** = shown



03-3300



03-3191



03-3175

Hepp-Scheidel Needle Holder

ultra-lightweight, straight, Sapphire™

Art.-No.	length mm	Insert / Tip mm
03-3300*	180	◊ 1,2
03-3300.02	180	◊ 0,2
03-3300.04	180	◊ 0,4
03-3300.08	180	◊ 0,8

* bold = shown

for sutures 8-0
and smaller



A



B

for sutures 6-0
and smaller



C



D

Micro Needle Holders

ultra-lightweight, without ratchet, Sapphire™

Fig.	Art.-No.	length mm	Insert / Jaw mm
A	03-3170	180	◊ 0,4 x 11
B	03-3171	180	◊ 0,4 x 11
C	03-3180	180	◊ 0,8 x 11
D	03-3181	180	◊ 0,8 x 11
A	03-3190	205	◊ 0,4 x 11
B	03-3191*	205	◊ 0,4 x 11
C	03-3200	205	◊ 0,8 x 11
D	03-3201	205	◊ 0,8 x 11
A	03-3210	230	◊ 0,4 x 11
B	03-3211	230	◊ 0,4 x 11
C	03-3220	230	◊ 0,8 x 11
D	03-3221	230	◊ 0,8 x 11

ultra-lightweight, with ratchet, Sapphire™

Fig.	Art.-No.	length mm	Insert / Jaw mm
A	03-3175*	180	◊ 0,4 x 11
B	03-3176	180	◊ 0,4 x 11
C	03-3185	180	◊ 0,8 x 11
D	03-3186	180	◊ 0,8 x 11
A	03-3195	205	◊ 0,4 x 11
B	03-3196	205	◊ 0,4 x 11
C	03-3205	205	◊ 0,8 x 11
D	03-3206	205	◊ 0,8 x 11
A	03-3215	230	◊ 0,4 x 11
B	03-3216	230	◊ 0,4 x 11
C	03-3225	230	◊ 0,8 x 11
D	03-3226	230	◊ 0,8 x 11



10-6620

41-3200/N

10-6620/R

10-6622/Y

10-6620/P



10-6622/B

10-6622/WK

Micro Ring Forceps

ultra-lightweight, straight, Sapphire™

Art.-No.	length mm	Insert / Jaw mm
10-6620*	180	◊ 0,5 x 1
10-6622*	210	◊ 0,5 x 1

Micro DeBakey Forceps

ultra-lightweight, straight

Art.-No.	length mm	Tip mm
10-6630	180	1
10-6632	180	1,5
10-6640	210	1
10-6642	210	1,5

* bold = shown

Micro Forceps

ultra-lightweight, straight

Art.-No.	length mm	Tip mm	teeth	Insert
41-3200*	180	0,8		◊
41-3201	180	0,4		◊
41-3202	180	0,2		◊
41-3205	180	0,8	1 x 2	
41-3207	180	1,2	1 x 2	

ultra-lightweight, curved

Art.-No.	length mm	Tip mm	teeth
41-3206	180	0,8	1 x 2





41-4500

41-2202

One Finger-Micro Scissors

ultra-lightweight, straight

Art.-No.	length mm
41-4500*	170
41-4502	200

ultra-lightweight, curved

Art.-No.	length mm
41-4501	170
41-4503	200

One Finger-Micro Needle Holders

ultra-lightweight, straight, Sapphire™

Art.-No.	length mm	Insert
41-2200	170	
41-2202*	200	

ultra-lightweight, curved, Sapphire™

Art.-No.	length mm	Insert
41-2201	170	
41-2203	200	

* bold = shown

75-1000

75-1001

75-1101



75-1100

75-1200

- Ultra-fine instruments for micro vessel-, nerve- and hand-surgery
- Maximum control and precision through ergonomic perforated handle
- Perfect balance and firm position in the hand through stabilization rod
- Even lighter than most titanium instruments

Nano Typing Forceps

ultra-lightweight, straight, Sapphire™

Art.-No.	length mm	Insert
75-1000*	150	

ultra-lightweight, curved, Sapphire™

Art.-No.	length mm	Insert
75-1001*	150	

Nano Scissors

ultra-lightweight, straight

Art.-No.	length mm
75-1100*	150

ultra-lightweight, curved

Art.-No.	length mm
75-1101*	150

Nano Needle Holders

ultra-lightweight, straight, Sapphire™

Art.-No.	length mm	Insert
75-1200*	150	

ultra-lightweight, curved, Sapphire™

Art.-No.	length mm	Insert
75-1201*	150	

* bold = shown



Our micro needle holders are set for grasping needles without rotation. Please be sure to return instruments for periodic routine maintenance to keep them in very best condition. You can determine if a needle holder requires restoration of its Sapphire™ Enhanced

Needle Grip Surface by placing a needle at the very tip and then slightly pushing or pulling it or by holding the closed tip up against the light. If the needle easily moves, or if you see light gaps between the tips, the needle holder should be sent for service.



Type	Insert	Tip size	0/0	1/0	2/0	3/0	4/0	5/0	6/0	7/0	8/0	9/0	10/0	11/0
Micro Needle Holders	Sapphire™	0.2 mm											X	X
	Sapphire™	0.4 mm									X	X	X	X
	Sapphire™	0.8 mm							X	X	X	X		
	Sapphire™	1.2 mm						X	X	X				
	TC (M) Micro Pitch 0.20-0.30	1.2 mm						X	X	X				
Heavy Micro Needle Holders	Sapphire™	2.0 mm			X	X	X	X	X					



Like diamonds in your hands!

Precision crafted by skilled artisans with the support of the most advanced computer controlled manufacturing technologies, the GEISTER® microsurgical instrument range offers you maximum strength and durability, precise control, sensitive tactile feel, lightweight, superior balance and the quality with meticulous attention to the even smallest details that you expect from a GEISTER® instrument.

All GEISTER® Micro Needle Holders and Forceps - both in stainless steel and titanium - feature our exclusive Sapphire™ enhanced needle grip surface for a firm grasp of needles without rotation and maximum control during suturing or grasping tissue.

Available are patterns with 0.3 or 0.4 mm tip dimensions designed for holding needles size 8-0 and smaller, as well as patterns with 0.8 mm tip for needles size 6-0 and smaller and 1.2 mm for needles size 5-0 and smaller. Featured streamline models with a twisted boxlock effectively prevent snagging of sutures in the boxlock area. Special soft touch models with a new softer ratchet provide for even more precise anastomosis, faster action and response and even better control and feeling.

Titanium instruments are approx. 50 % lighter than stainless steel instruments, providing for reduced fatigue during extended operations. They provide excellent balance and feel, at least traumatic and antimagnetic. They are easy to maintain and to sterilize, just in the same manner as stainless steel instruments. For easier identification all GEISTER® titanium instruments are anodized in blue color.

Superior in workmanship, quality, and reliability, our fine spring style micro scissors deliver precise, sharp and smooth cuts even on smallest vascular and tissue structures. They are handcrafted from the finest surgical grade stainless steel available and completed with an individual hand grind on each cutting edge. You have a choice of round handles, here in particular our Fairgrip™ ultra handle, offering a better tactile feeling, or of flat serrated handles, providing a more controlled grip. Featured nano jaw models come with shorter and even finer blades for unsurpassed precision even on the most delicate vascular.

GEISTER® micro tissue forceps available with ring-, tying or atraumatic DeBakey tips are manufactured with round handles to guarantee a secure and firm hold of the instrument in your hand. Guide pins and special textured tips provide for precise and atraumatic tissue handling without slippage or twisting of jaws.



Fairgrip™ultra Micro – Potts

Coronary Scissors



Fig.	Length mm /"	✂	blade length mm	Art.-No.	Fig.	Length mm /"	✂	blade length mm	Art.-No.	Type
A	170/6½	-	10	03-0606	-	-	-	-	-	-
B	170/6½	-	10	03-0608	-	-	-	-	-	-
C	170/6½	25°	10	03-0610	C	210/8¼	25°	10	03-0620	Streamline*
D	170/6½	45°	10	03-0612	D	210/8¼	45°	10	03-0621	Streamline*
E	170/6½	60°	10	03-0614	E	210/8¼	60°	10	03-0622	Streamline*
F	170/6½	90°	10	03-0616	F	210/8¼	90°	10	03-0623	Streamline*
G	170/6½	125°	10	03-0618	G	210/8¼	125°	10	03-0624	Streamline*

Standard blade length 10 mm. For shorter 7 mm blade add "KS" behind Art.-No. for ordering. For longer 14 mm blade add "LS" behind Art.-No. for ordering.

* Scissors with length 210 mm only available in Streamline.

Fairgrip™ultra Titanium Micro – Potts Coronary Scissors



Fig.	Length mm/"	↘	blade length mm	Art.-No.	Fig.	Length mm/"	↘	blade length mm	Art.-No.	Type
A	170/6½	-	10	03-0606.TI	-	-	-	-	-	-
B	170/6½	-	10	03-0608.TI	-	-	-	-	-	-
C	170/6½	25°	10	03-0610.TI	C	210/8¼	25°	10	03-0620.TI	Streamline*
D	170/6½	45°	10	03-0612.TI	D	210/8¼	45°	10	03-0621.TI	Streamline*
E	170/6½	60°	10	03-0614.TI	E	210/8¼	60°	10	03-0622.TI	Streamline*
F	170/6½	90°	10	03-0616.TI	F	210/8¼	90°	10	03-0623.TI	Streamline*
G	170/6½	125°	10	03-0618.TI	G	210/8¼	125°	10	03-0624.TI	Streamline*

Standard blade length 10 mm. For shorter 7 mm blade add "KS" behind Art.-No. for ordering. For longer 14 mm blade add "LS" behind Art.-No. for ordering.

* Scissors with length 210 mm only available in Streamline.

Fairgrip™ ultra
with ratchet



for sutures 8-0
and smaller



A



B

for sutures 6-0
and smaller



C



D

for sutures 5-0
and smaller



E



F

Fig.	Length mm/"	jaw	Art.-No.	Fig.	Length mm/"	jaw	Art.-No.	Fig.	Length mm/"	jaw	Art.-No.
A	180/7	0.4 x 12	03-0650.04	A	210/8¼	0.4 x 12	03-0655.04	A	230/9	0.4 x 12	03-0660.04
B	180/7	0.4 x 12	03-0651.04	B	210/8¼	0.4 x 12	03-0656.04	B	230/9	0.4 x 12	03-0661.04
C	180/7	0.8 x 12	03-0650.08	C	210/8¼	0.8 x 12	03-0655.08	C	230/9	0.8 x 12	03-0660.08
D	180/7	0.8 x 12	03-0651.08	D	210/8¼	0.8 x 12	03-0656.08	D	230/9	0.8 x 12	03-0661.08
E	180/7	1.2 x 12	03-0650	E	210/8¼	1.2 x 12	03-0655	E	230/9	1.2 x 12	03-0660
F	180/7	1.2 x 12	03-0651	F	210/8¼	1.2 x 12	03-0656	F	230/9	1.2 x 12	03-0661
								C	260/10¼	0.8 x 12	03-0665.08
								E	260/10¼	1.2 x 12	03-0665

Fairgrip™ ultra Titanium Streamline
with ratchet

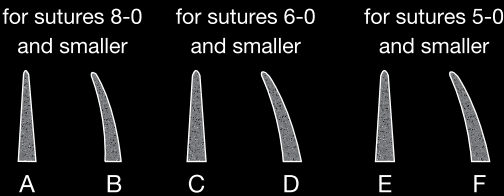
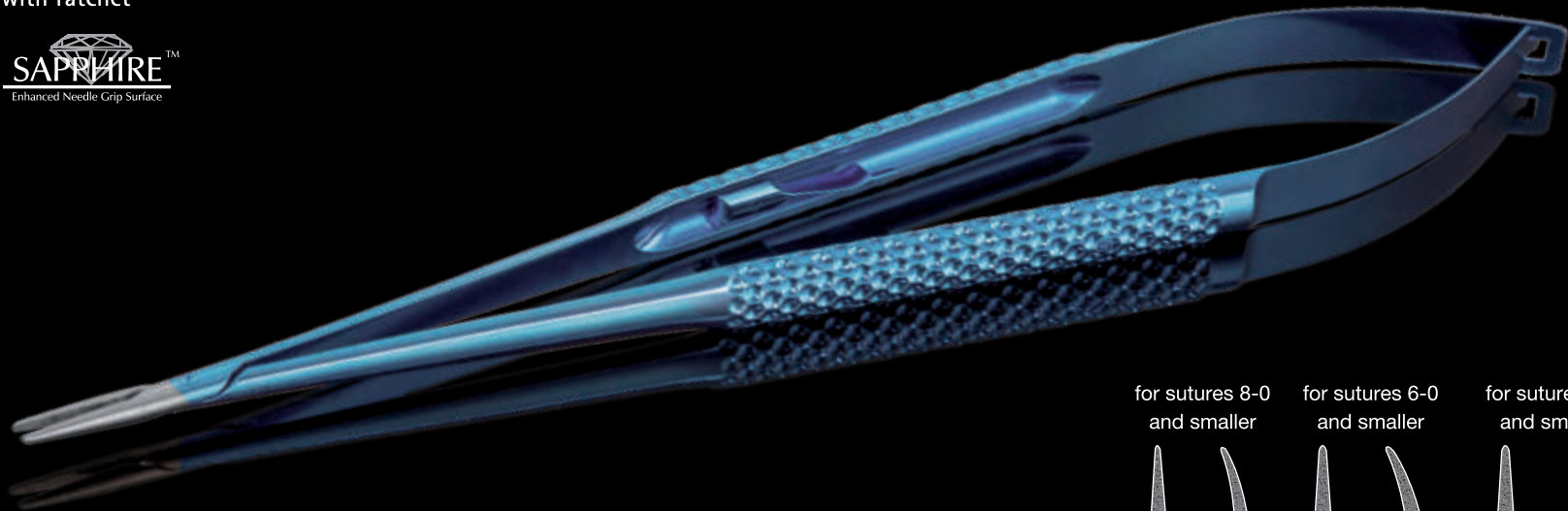


Fig.	Length mm/"	jaw	Art.-No.	Fig.	Length mm/"	jaw	Art.-No.	Fig.	Length mm/"	jaw	Art.-No.
A	180/7	0.4 x 12	03-0650.04TI	A	210/8¼	0.4 x 12	03-0655.04TI	A	230/9	0.4 x 12	03-0660.04TI
B	180/7	0.4 x 12	03-0651.04TI	B	210/8¼	0.4 x 12	03-0656.04TI	B	230/9	0.4 x 12	03-0661.04TI
C	180/7	0.8 x 12	03-0650.08TI	C	210/8¼	0.8 x 12	03-0655.08TI	C	230/9	0.8 x 12	03-0660.08TI
D	180/7	0.8 x 12	03-0651.08TI	D	210/8¼	0.8 x 12	03-0656.08TI	D	230/9	0.8 x 12	03-0661.08TI
E	180/7	1.2 x 12	03-0650.TI	E	210/8¼	1.2 x 12	03-0655.TI	E	230/9	1.2 x 12	03-0660.TI
F	180/7	1.2 x 12	03-0651.TI	F	210/8¼	1.2 x 12	03-0656.TI	F	230/9	1.2 x 12	03-0661.TI

Fairgrip™ ultra Heavy Streamline
with ratchet



for sutures 2-0
and smaller

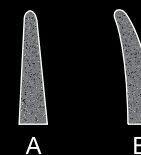


Fig.	Length mm/“	Handle	jaw	Art.-No.	Fig.	Length mm/“	Handle	jaw	Art.-No.	Fig.	Length mm/“	Handle	jaw	Art.-No.
A	190/7½	R10	2.0 x 18	03-0680	A	230/9	R10	2.0 x 18	03-0682	A	260/10¼	R10	2.0 x 18	03-0684
B	190/7½	R10	2.0 x 18	03-0681	B	230/9	R10	2.0 x 18	03-0683	B	260/10¼	R10	2.0 x 18	03-0685

Fairgrip™ ultra TC with ratchet



TC-inserts 0,2 mm (M)
for sutures 5-0 and
smaller

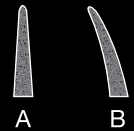


Fig.	Length mm/"	jaw	Art.-No.	Fig.	Length mm/"	jaw	Art.-No.	Fig.	Length mm/"	jaw	Art.-No.
A	180/7	1.2 x 12	24-1140	A	210/8¼	1.2 x 12	24-1150	A	230/9	1.2 x 12	24-1160
B	180/7	1.2 x 12	24-1141	B	210/8¼	1.2 x 12	24-1151	B	230/9	1.2 x 12	24-1161

Fairgrip™ ultra Tying Forceps with platform



Also available
counterbalanced

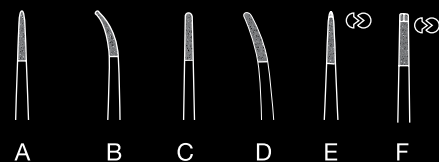


Fig.	Length mm / "	Jaw mm	teeth	Art.-No. ①
A	180/7	0.4	1 x 2	10-6056
F	180/7	0.8	1 x 2	10-6052
E	210/8¼	0.4	1 x 2	10-6058
F	210/8¼	0.8	1 x 2	10-6054

Fig.	Length mm / "	Jaw mm	Art.-No. ①	Art.-No. ②
A	180/7	0.4 x 7	10-6032	10-6332
B	180/7	0.4 x 7	10-6033	10-6333
C	180/7	0.8 x 7	10-6030	10-6330
D	180/7	0.8 x 7	10-6031	10-6331
A	210/8¼	0.4 x 7	10-6036	10-6336
B	210/8¼	0.4 x 7	10-6037	10-6337
C	210/8¼	0.8 x 7	10-6034	10-6334
D	210/8¼	0.8 x 7	10-6035	10-6335
A	230/9	0.4 x 7	10-6047	-
C	230/9	0.8 x 7	10-6045	-
C	260/10¼	0.8 x 7	10-6048	-

Fairgrip™ ultra Titanium Tying Forceps with platform

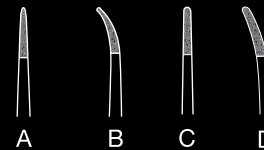
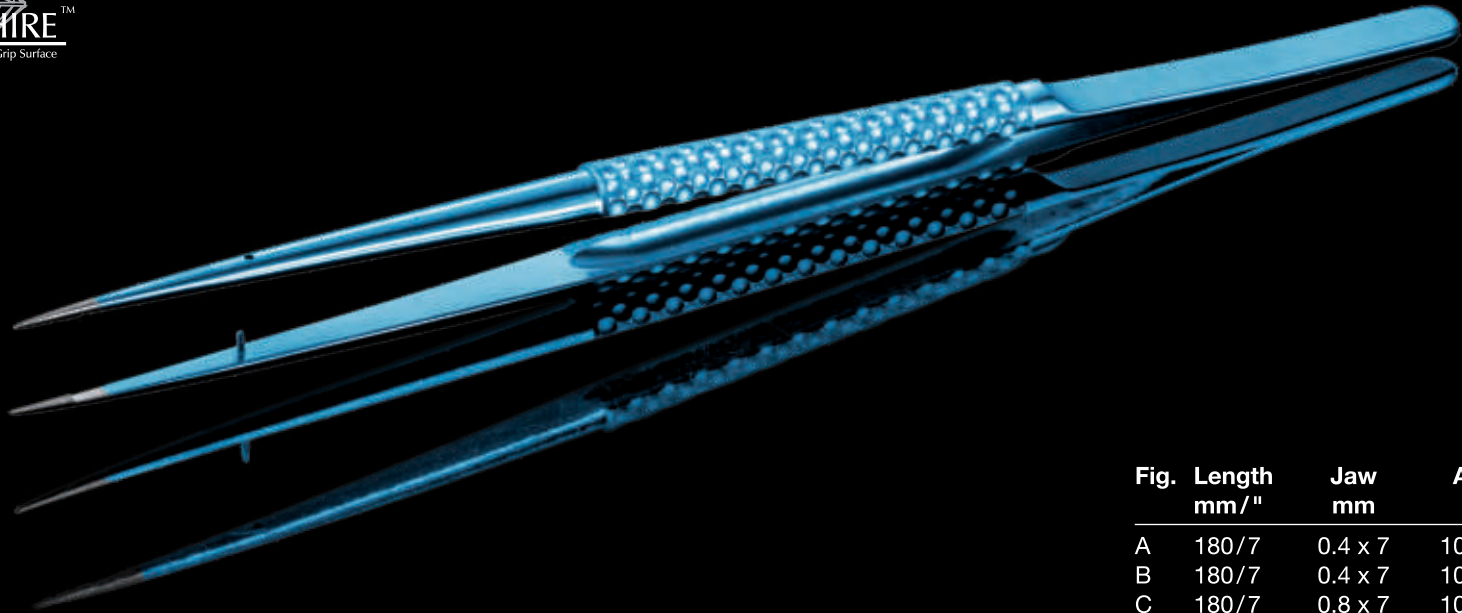


Fig.	Length mm/"	Jaw mm	Art.-No.
A	180/7	0.4 x 7	10-6032.TI
B	180/7	0.4 x 7	10-6033.TI
C	180/7	0.8 x 7	10-6030.TI
D	180/7	0.8 x 7	10-6031.TI
A	210/8¼	0.4 x 7	10-6036.TI
B	210/8¼	0.4 x 7	10-6037.TI
C	210/8¼	0.8 x 7	10-6034.TI
D	210/8¼	0.8 x 7	10-6035.TI
A	230/9	0.4 x 7	10-6047.TI
C	230/9	0.8 x 7	10-6045.TI

Fairgrip™ ultra Forceps

Ring Tip

SAPPHIRE™
Enhanced Needle Grip Surface



Fig.	Length mm / "	Ring Ø mm	Art.-No. ①	Art.-No. ②
A	180/7	0.5 x 1.0	10-6010	10-6310
B	180/7	0.5 x 1.0	10-6011	10-6311
A	210/8¼	0.5 x 1.0	10-6012	10-6312
B	210/8¼	0.5 x 1.0	10-6013	10-6313
A	230/9	0.5 x 1.0	10-6014	10-6314
B	230/9	0.5 x 1.0	10-6015	10-6315

Fairgrip™ ultra Titanium Forceps Ring Tip

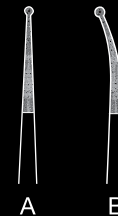


Fig.	Length mm / "	Ring Ø mm	Art.-No. ①
A	180/7	0.5 x 1.0	10-6010.TI
B	180/7	0.5 x 1.0	10-6011.TI
A	210/8¼	0.5 x 1.0	10-6012.TI
B	210/8¼	0.5 x 1.0	10-6013.TI
A	230/9	0.5 x 1.0	10-6014.TI
B	230/9	0.5 x 1.0	10-6015.TI

Fairgrip™ ultra DeBakey

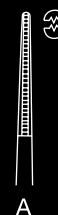


Fig.	Length mm / "	jaw mm	Art.-No.
A	180 / 7	1.0	10-6060
A	210 / 8¼	1.0	10-6065
A	230 / 9	1.0	10-6076

Fairgrip™ ultra Titanium DeBakey

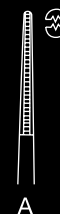
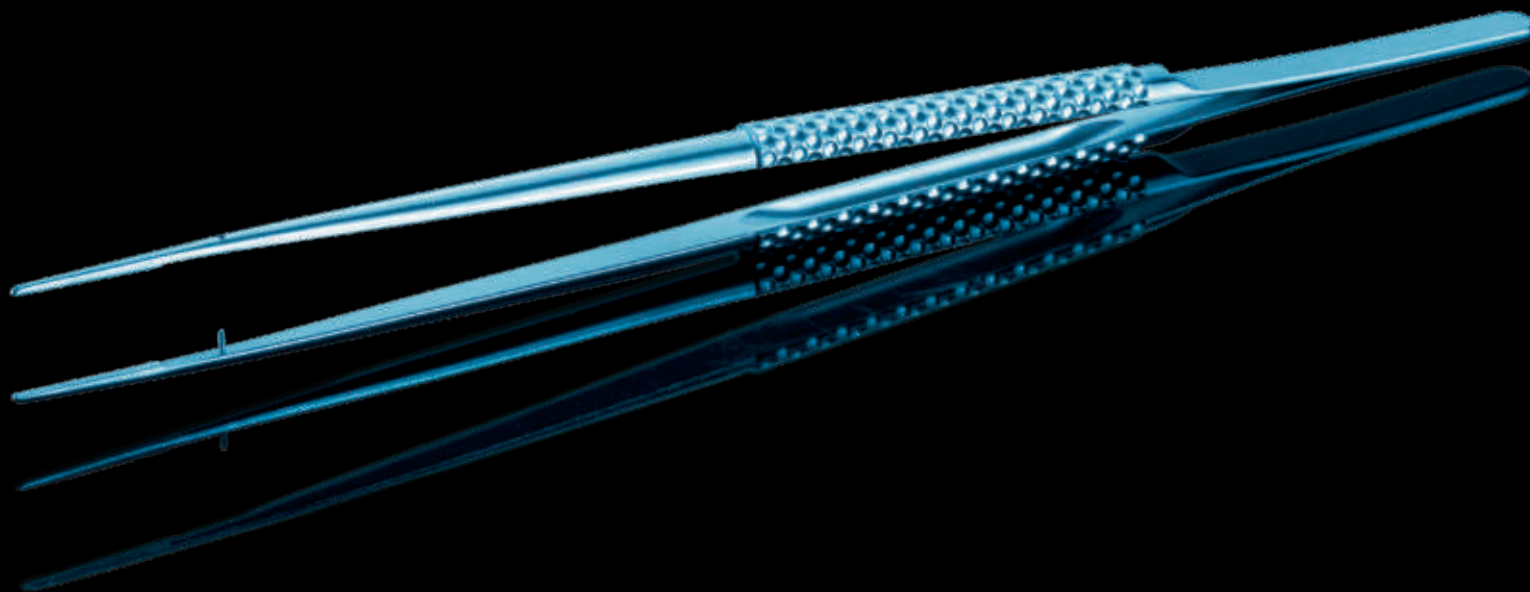
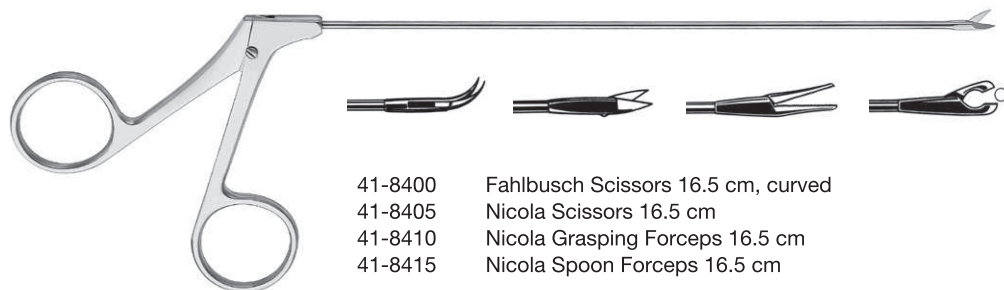


Fig.	Length mm / "	jaw mm	Art.-No.
A	180/7	1.0	10-6060.TI
A	210/8¼	1.0	10-6065.TI
A	230/9	1.0	10-6076.TI

Nicola (Fahlbusch)



- | | |
|---------|------------------------------------|
| 41-8400 | Fahlbusch Scissors 16.5 cm, curved |
| 41-8405 | Nicola Scissors 16.5 cm |
| 41-8410 | Nicola Grasping Forceps 16.5 cm |
| 41-8415 | Nicola Spoon Forceps 16.5 cm |

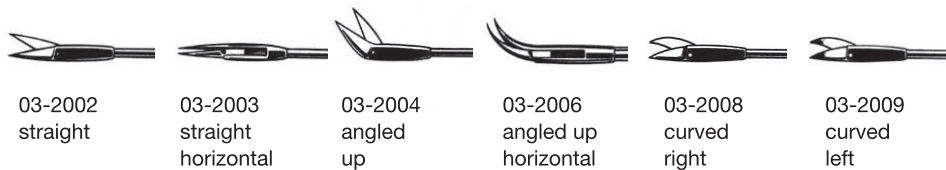


For additional micro instruments see
special catalog Micro instruments –
Like diamonds in your hands!

Micro Instruments

with squeeze handle, angled shaft

Scissors



- | | | | | | |
|---------------------|-----------------------------------|-------------------------|------------------------------------|----------------------------|---------------------------|
| 03-2002
straight | 03-2003
straight
horizontal | 03-2004
angled
up | 03-2006
angled up
horizontal | 03-2008
curved
right | 03-2009
curved
left |
|---------------------|-----------------------------------|-------------------------|------------------------------------|----------------------------|---------------------------|

Forceps



- | | | |
|----------------------------------|---------------------|---------|
| 03-2010
straight
8 mm edge | 03-2020
straight | 18.5 cm |
|----------------------------------|---------------------|---------|

Spoon



- | | | | | | | | | |
|----------------------|----------------------------|---------------------------|------------------------------------|---------------------|-------------------------|----------------------------|---------------------------|---------|
| 03-2021
angled up | 03-2022
curved
right | 03-2023
curved
left | 03-2025
straight
1 x 2 teeth | 03-2030
straight | 03-2031
angled
up | 03-2032
curved
right | 03-2033
curved
left | 18.5 cm |
|----------------------|----------------------------|---------------------------|------------------------------------|---------------------|-------------------------|----------------------------|---------------------------|---------|



A close-up photograph of a hand holding a pair of surgical forceps. The hand is positioned over a patient's head, which is visible in the background. The forceps are held in a way that demonstrates their use. The patient's head is covered with a white cap, and the background is slightly blurred, focusing attention on the hand and the instrument.

Forceps and Clamps

Bipolar Tissue Forceps

Bipolar Tissue Forceps

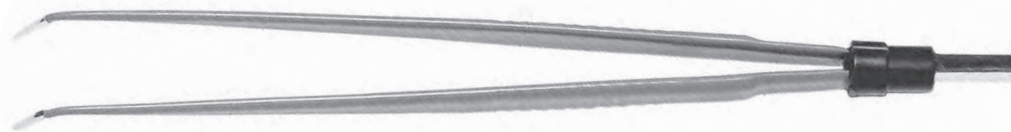
with flat Euro-plug, angled tip

10-7025	15 cm angled	tip 2.0 mm
10-7024	15 cm angled	tip 1.0 mm
10-7026	15 cm angled	tip 0.3 mm
10-7035	18 cm angled	tip 2.0 mm
10-7034	18 cm angled	tip 1.0 mm
10-7036	18 cm angled	tip 0.3 mm
10-7045	20 cm angled	tip 2.0 mm
10-7044	20 cm angled	tip 1.0 mm
10-7046	20 cm angled	tip 0.3 mm
10-7055	22 cm angled	tip 2.0 mm
10-7054	22 cm angled	tip 1.0 mm
10-7056	22 cm angled	tip 0.3 mm
10-7065	24 cm angled	tip 2.0 mm
10-7064	24 cm angled	tip 1.0 mm
10-7066	24 cm angled	tip 0.3 mm

Bipolar Tissue Forceps

with flat Euro-plug, straight tip

10-7021	15 cm	tip 2.0 mm
10-7020	15 cm	tip 1.0 mm
10-7022	15 cm	tip 0.3 mm
10-7031	18 cm	tip 2.0 mm
10-7030	18 cm	tip 1.0 mm
10-7032	18 cm	tip 0.3 mm
10-7041	20 cm	tip 2.0 mm
10-7040	20 cm	tip 1.0 mm
10-7042	20 cm	tip 0.3 mm
10-7051	22 cm	tip 2.0 mm
10-7050	22 cm	tip 1.0 mm
10-7052	22 cm	tip 0.3 mm
10-7061	24 cm	tip 2.0 mm
10-7060	24 cm	tip 1.0 mm
10-7062	24 cm	tip 0.3 mm



10-7034



10-7030



Euro-plug
(flat) standard



US-plug (2-pin) optional
Add „US“ behind catalog no.

Forceps for connection to the bipolar output of electrosurgical generators. Sterilisable up to 280°F/137°C.

10-7201



10-7124



10-7012


Bipolar ENT Tissue Forceps with flat Euro-plug, knee-bent, 17cm, straight tip

10-7201	tip 2.0 mm
10-7200	tip 1.0 mm
10-7202	tip 0.3 mm

Bipolar Bayonet Tissue Forceps with flat Euro-plug, straight tip

10-7114	18 cm bayonet	tip 2.0 mm
10-7110	18 cm bayonet	tip 1.0 mm
10-7111	18 cm bayonet	tip 0.3 mm
10-7124	20 cm bayonet	tip 2.0 mm
10-7120	20 cm bayonet	tip 1.0 mm
10-7121	20 cm bayonet	tip 0.3 mm
10-7134	22 cm bayonet	tip 2.0 mm
10-7130	22 cm bayonet	tip 1.0 mm
10-7131	22 cm bayonet	tip 0.3 mm
10-7144	24 cm bayonet	tip 2.0 mm
10-7140	24 cm bayonet	tip 1.0 mm
10-7141	24 cm bayonet	tip 0.3 mm

Bipolar Jeweler's Forceps with flat Euro-plug, straight tip

10-7001	7 cm straight	tip 0.25 mm
10-7000	7 cm straight	tip 0.45 mm
10-7003	7 cm angled	tip 0.25 mm
10-7002	7 cm angled	tip 0.45 mm
10-7012	11 cm straight	tip 0.25 mm
10-7010	11 cm straight	tip 0.60 mm
10-7016	11 cm angled	tip 0.25 mm
10-7014	11 cm angled	tip 0.60 mm



For additional instruments see special catalog Powered.

Bipolar Tissue Forceps



Euro-plug
(flat) standard



US-plug (2-pin) optional
Add „US“ behind catalog no.

A, straight

Length	Pointed 0.5 mm tip	Blunt 1.0 mm tip	Blunt 2.0 mm tip	Material
180 mm	10-7380	10-7381	10-7382	Titanium
200 mm	10-7390	10-7391	10-7392	Titanium

B, bayonet

Length	Pointed 0.5 mm tip	Blunt 1.0 mm tip	Blunt 1,5 mm tip	Material
160 mm	10-7300	10-7301	10-7302	Titanium
180 mm	10-7310	10-7311	10-7312	Titanium
200 mm	10-7320	10-7321	10-7322	Titanium
220 mm	10-7330	10-7331	10-7332	Titanium
240 mm	10-7340	10-7341	10-7342	Titanium
jaw angled (not illustrated)				
220 mm	10-7335	10-7336		Titanium

C, straight

Length	Pointed 0.5 mm tip	Blunt 1.0 mm tip	Blunt 2.0 mm tip	Stainless Steel
180 mm	10-7480	10-7481	10-7482	with irrigation
200 mm	10-7490	10-7491	10-7492	with irrigation
220 mm	10-7500	10-7501	10-7502	with irrigation

D, bayonet

Length	Pointed 0.5 mm tip	Blunt 1.0 mm tip	Blunt 1,5 mm tip	Stainless Steel
180 mm	10-7410	10-7411	10-7412	with irrigation
200 mm	10-7420	10-7421	10-7422	with irrigation
220 mm	10-7430	10-7431	10-7432	with irrigation
240 mm	10-7440	10-7441	10-7442	with irrigation

Additional bipolar forceps and electrosurgical units see catalog „Electrosurgery“



A, straight



B, bayonet



C, straight

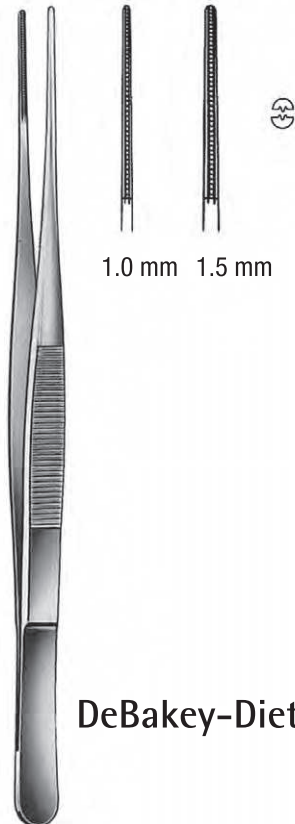


D, bayonet

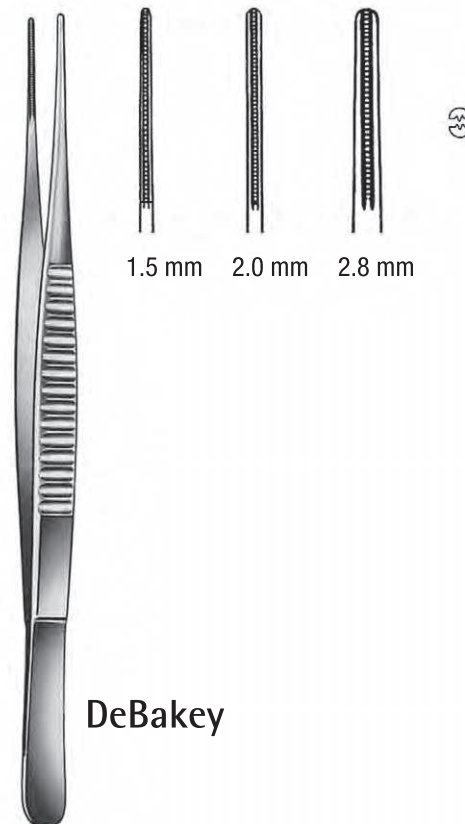
Forceps for connection to the bipolar output of electrosurgical generators. Sterilisable up to 280°F/137°C.



DeBakey-Light



DeBakey-Diethrich



DeBakey

DeBakey-Light

Length	jaw	Art.-No.
15.0 cm	1.0 mm	10-0050
19.5 cm	1.0 mm	10-0052
24.0 cm	1.0 mm	10-0054

DeBakey-Diethrich

Length	jaw	Art.-No.
15.0 cm	1.0 mm	10-0096
19.5 cm	1.0 mm	10-0097
24.0 cm	1.0 mm	10-0098
15.0 cm	1.5 mm	10-0100
19.5 cm	1.5 mm	10-0102
24.0 cm	1.5 mm	10-0104

DeBakey

Length	jaw	Art.-No.
15.0 cm	1.5 mm	10-0106
19.5 cm	1.5 mm	10-0107
24.0 cm	1.5 mm	10-0108
30.0 cm	1.5 mm	10-0109
15.0 cm	2.0 mm	10-0110
19.5 cm	2.0 mm	10-0112
24.0 cm	2.0 mm	10-0114
30.0 cm	2.0 mm	10-0116
38.0 cm	2.0 mm	10-0118
15.0 cm	2.8 mm	10-0121
19.5 cm	2.8 mm	10-0123
24.0 cm	2.8 mm	10-0125
30.0 cm	2.8 mm	10-0127
38.0 cm	2.8 mm	10-0129

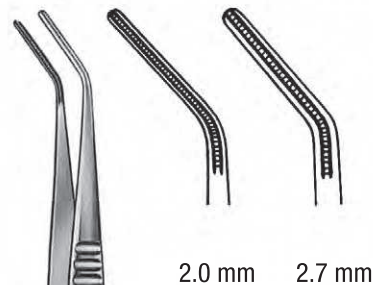
DeBakey		
Length	jaw	Art.-No.
15.0 cm	2.7 mm	10-0120
19.5 cm	2.7 mm	10-0122
24.0 cm	2.7 mm	10-0124
30.0 cm	2.7 mm	10-0126
38.0 cm	2.7 mm	10-0128
15.0 cm	3.5 mm	10-0130
19.5 cm	3.5 mm	10-0132
24.0 cm	3.5 mm	10-0134
30.0 cm	3.5 mm	10-0136
38.0 cm	3.5 mm	10-0138

DeBakey		
Length	jaw	Art.-No.
15.0 cm	2.0 mm	10-0140
19.5 cm	2.0 mm	10-0142
24.0 cm	2.0 mm	10-0144
30.0 cm	2.0 mm	10-0146
15.0 cm	2.7 mm	10-0141
19.5 cm	2.7 mm	10-0143
24.0 cm	2.7 mm	10-0145
30.0 cm	2.7 mm	10-0148

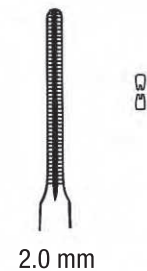
Cooley		
Length	jaw	Art.-No.
15.0 cm	2.0 mm	10-0180
19.5 cm	2.0 mm	10-0182
24.0 cm	2.0 mm	10-0184



DeBakey



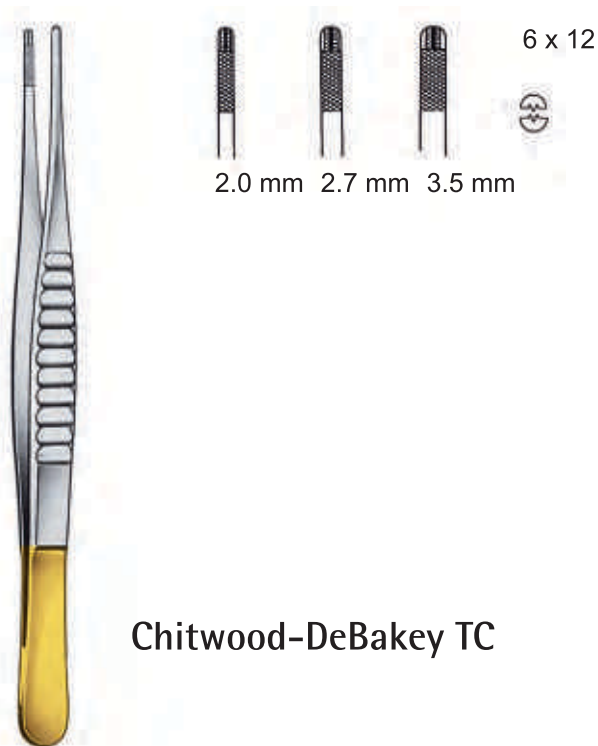
DeBakey



Cooley



Chitwood-DeBakey TC



Chitwood-DeBakey TC

Chitwood-DeBakey TC		
Length	jaw	Art.-No.
15.0 cm	1.5 mm	10-0600
19.5 cm	1.5 mm	10-0602
24.0 cm	1.5 mm	10-0604

Chitwood-DeBakey TC		
Length	jaw	Art.-No.
15.0 cm	2.0 mm	10-0620
19.5 cm	2.0 mm	10-0622
24.0 cm	2.0 mm	10-0624
15.0 cm	2.7 mm	10-0630
19.5 cm	2.7 mm	10-0632
24.0 cm	2.7 mm	10-0634
15.0 cm	3.5 mm	10-0640
19.5 cm	3.5 mm	10-0642
24.0 cm	3.5 mm	10-0644

Adson TC

Smooth

Length	Art.-No.
12.0 cm	10-0501

Standard

Length	Art.-No.
12.0 cm	10-0500
15.0 cm	10-0502

Adson-Brown TC

Length	Art.-No.
12.0 cm	10-0504
15.0 cm	10-0505

Adson TC-Micro-Adson TC

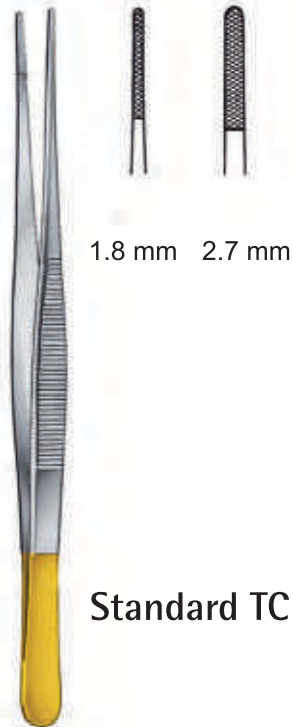
Length	jaw	Art.-No.
12.0 cm	1.7 mm	10-0550
12.0 cm	1.0 mm	10-0551
15.0 cm	1.7 mm	10-0552
15.0 cm	1.0 mm	10-0553



Adson TC

Adson-Brown TC

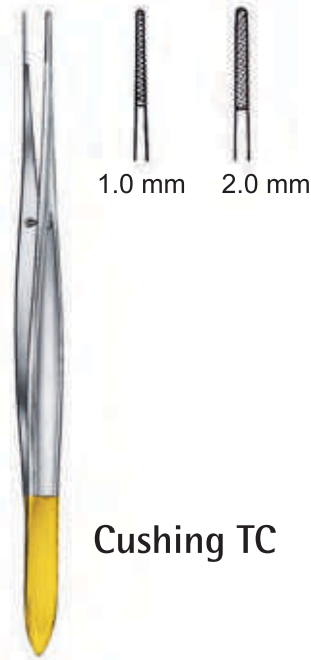
Adson TC
Micro-Adson TC



Standard TC



Potts-Smith TC



Cushing TC

Standard TC

Length	jaw	Art.-No.
14.5 cm	1.8 mm	10-0530
16.0 cm	1.8 mm	10-0532
18.0 cm	1.8 mm	10-0534
20.0 cm	1.8 mm	10-0535
23.0 cm	1.8 mm	10-0536
25.0 cm	1.8 mm	10-0537
14.5 cm	2.7 mm	10-0540
16.0 cm	2.7 mm	10-0541
18.0 cm	2.7 mm	10-0542
20.0 cm	2.7 mm	10-0543
23.0 cm	2.7 mm	10-0544

**Potts-Smith TC
With dissector**

Length	jaw	Art.-No.
16.0 cm	1.8 mm	10-0526
21.0 cm	1.8 mm	10-0527
23.0 cm	1.8 mm	10-0528
25.0 cm	1.8 mm	10-0529

**Cushing TC
Straight**

Length	jaw	Art.-No.
18.0 cm	1.0 mm	10-0513
18.0 cm	2.0 mm	10-0510

Angled

18.0 cm	1.0 mm	10-0513.GB
18.0 cm	2.0 mm	10-0512

Oehler TC

A

Length	Art.-No.
14.5 cm	10-0560
16.0 cm	10-0561
18.0 cm	10-0562
20.0 cm	10-0563
25.0 cm	10-0564

B

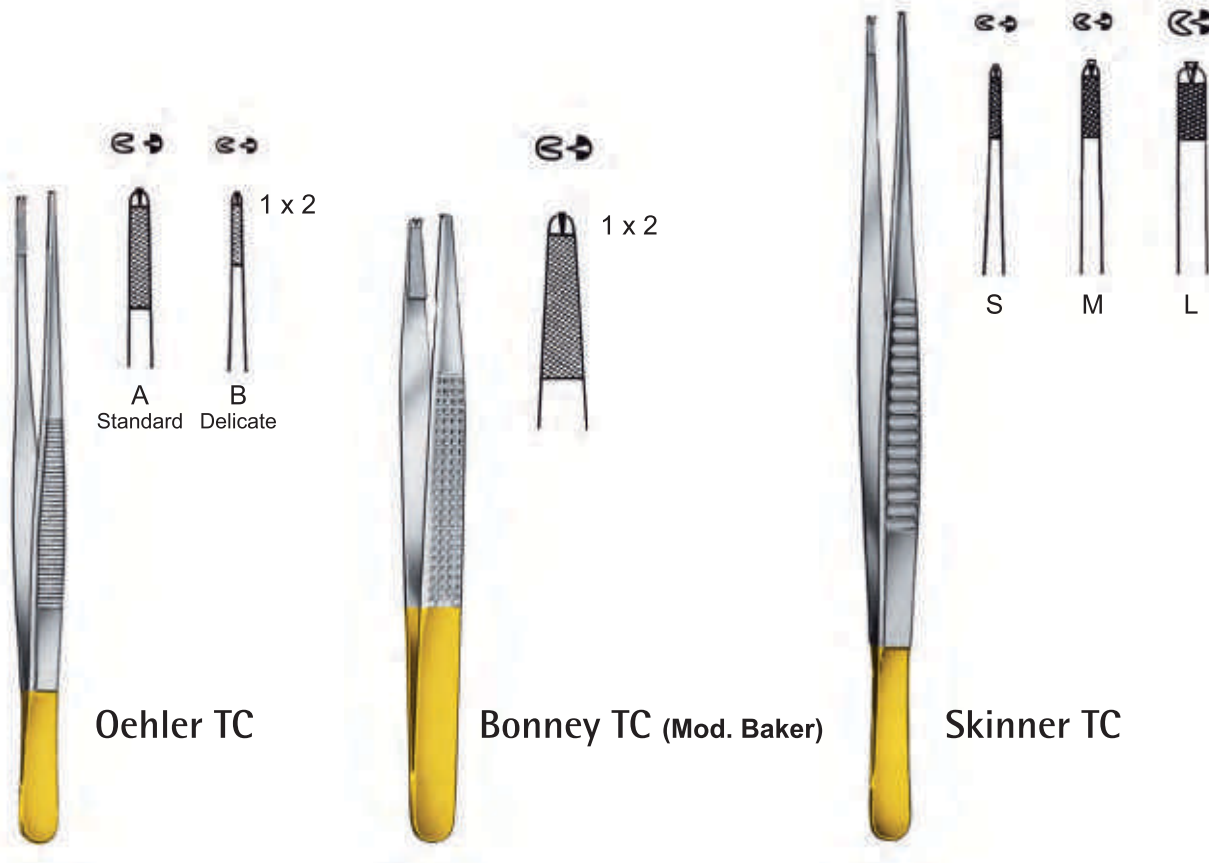
Length	Art.-No.
14.5 cm	10-0565
16.0 cm	10-0566
18.0 cm	10-0567
20.0 cm	10-0568
25.0 cm	10-0569

Bonney TC (Mod. Baker)

Length	Art.-No.
17.0 cm	10-0585

Skinner TC

Length	Size	Art.-No.
23.0 cm	S	10-0580
23.0 cm	M	10-0581
23.0 cm	L	10-0582



Micro Jeweller's

extra precisely matching jaws
with ultra-delicate 0,3 mm tips



10-3203 12 cm
10-3204 13.5 cm



10-3213 18 cm



10-3205 11 cm



with 10° angled dilation tips
10-3200 11 cm

SAPPHIRE™
Enhanced Needle Grip Surface

Also available with Sapphire™-jaws
on request (add ".AS" behind the article no.)



Jeweller's

No. 3
10-3103 11.5 cm



No. 4
10-3104 11.5 cm



No. 5
10-3105 11.5 cm



No. 7
10-3107 11.5 cm



Adson-Brown

10-1835 12.0 cm



Adson 1 x 2

10-1832 12 cm
10-1838 15 cm



Adson 1 x 2

serrated
10-1831 12 cm
10-1837 15 cm



Micro-Adson 1 x 2

10-1833 12 cm
10-1839 15 cm



1 x 2



2 x 3

Standard 1 x 2

Length	delicate	slender	regular	2 x 3 wide
11.5 cm	10-2130	10-2122	10-2102	
13.0 cm	10-2131	10-2124	10-2104	10-2140
14.5 cm	10-2132	10-2126	10-2106	10-2142
16.0 cm		10-2128	10-2108	10-2144
18.0 cm			10-2110	10-2146
20.0 cm			10-2112	10-2148
23.0 cm			10-2114	
25.0 cm			10-2116	
30.0 cm			10-2118	

Gerald 1 x 2

10-2200	18 cm, straight
10-2201	18 cm, curved
10-1551	24 cm, straight

Gerald Bayonet 1 x 2

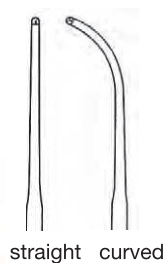
10-2202	18 cm
---------	-------



Standard
1 x 2



Gerald
1 x 2



Gerald Bayonet
1 x 2



Adson

10-1740 12 cm
10-1742 15 cm



Micro-Adson

10-1741 12 cm
10-1743 15 cm



Cushing

10-1910 17.5 cm, straight
10-1911 17.5 cm, curved
10-1910.TI Titanium, straight

Semken

10-1880	13.0 cm, straight
10-1881	13.0 cm, curved
10-1882	14.5 cm, straight
10-1883	14.5 cm, curved

Gerald

10-1900	18.0 cm, straight
10-1901	18.0 cm, curved
10-1550	24.0 cm, straight

Gerald Bayonet

10-1902	18.0 cm, straight
---------	-------------------



Semken

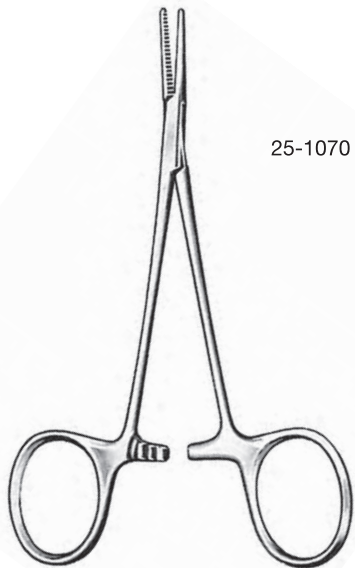


Gerald



Gerald
Bayonet

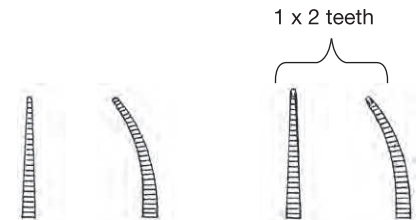
Halstead-Mosquito



25-1070



25-1090



25-1070
12.5 cm

25-1071
12.5 cm

25-1075
12.5 cm

25-1076
12.5 cm

Titanium
25-1070.TI

25-1071.TI

25-1075.TI

25-1076.TI

25-1090
20 cm

25-1091
20 cm

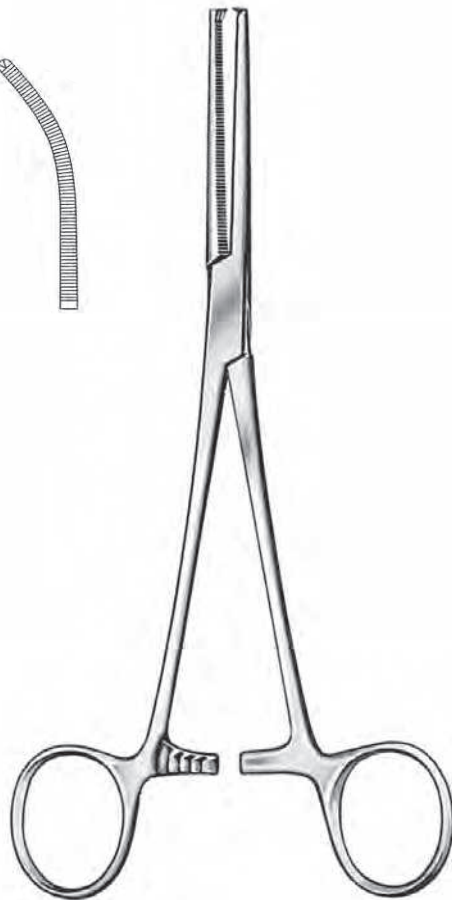
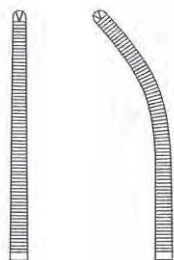
25-1092
20 cm

25-1093
20 cm

Hemostatic Forceps

Ochsner (Kocher)

1 x 2 teeth



Baby-Mixter



Ochsner (Kocher) straight

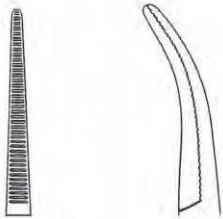
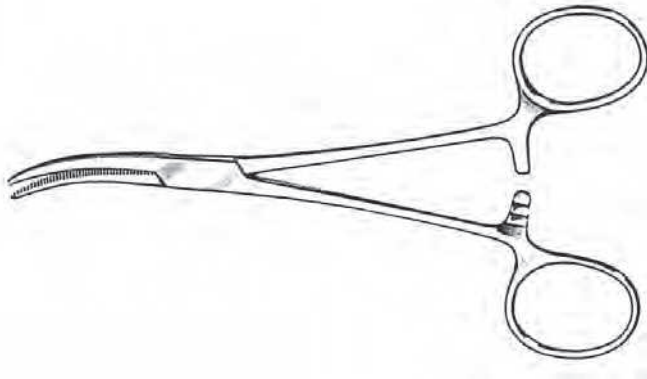
14 cm	25-1140
16 cm	25-1141
18 cm	25-1142
20 cm	25-1143
22 cm	25-1144
24 cm	25-1145
26 cm	25-1146
30 cm	25-1147

curved

14 cm	25-1150
16 cm	25-1151
18 cm	25-1152
20 cm	25-1153
22 cm	25-1154
24 cm	25-1155
26 cm	25-1156
30 cm	25-1157

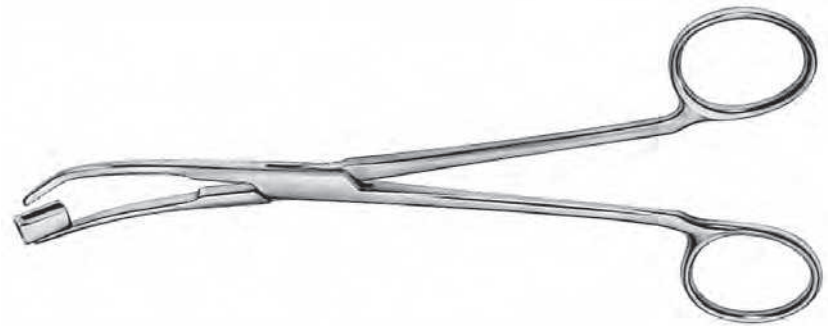
Baby-Mixter

18 cm	25-1363
-------	---------


Dandy

Hemostatic Forceps

25-1097	14 cm	
25-1097.MZ	14 cm	1 x 2 teeth


Schwartz
Applying Forceps
Titanium

20-0505	19 cm
20-0505.TI	19 cm


Schwartz
Bulldogs Clamps
Titanium

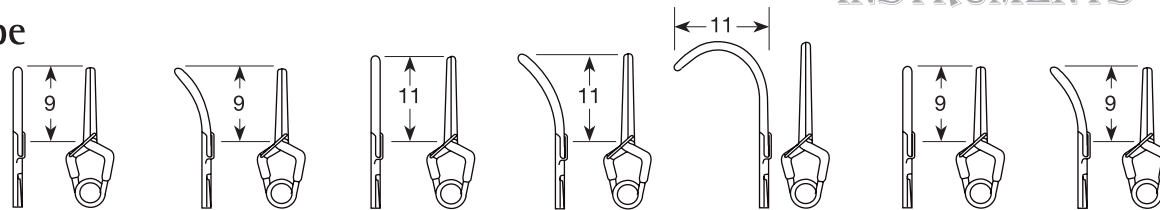
20-0500	0°	20-0501	25°	20-0502	45°
20-0500.TI	0°	20-0501.TI	25°	20-0502.TI	45°



Not for implantation

Temporary Vessel Clamps

Yasargil-type Standard



Stainless Steel
Titanium
max. opening
Force

41-5012
41-5012.TI
7.0 mm
180 gms

41-5014
41-5014.TI
6.8 mm
180 gms

41-5022
41-5022.TI
7.8 mm
180 gms

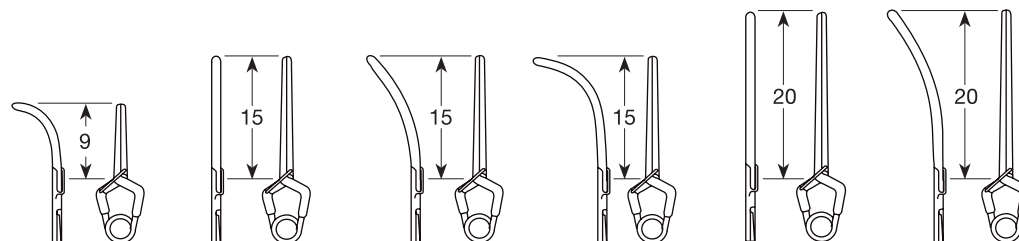
41-5024
41-5024.TI
7.5 mm
180 gms

41-5054
41-5054.TI
6.2 mm
180 gms

41-5112
41-5112.TI
7.0 mm
90 gms

41-5114
41-5114.TI
6.8 mm
90 gms

Applying Forceps
41-5500
17.5 cm



Stainless Steel
Titanium
max. opening
Force

41-5116
41-5116.TI
6.1 mm
110 gms

41-5128
41-5128.TI
9.2 mm
90 gms

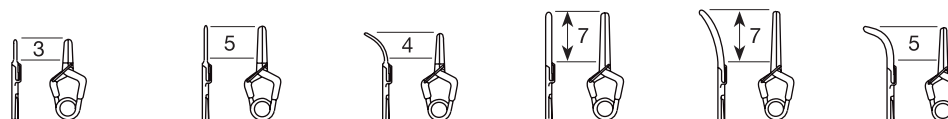
41-5130
41-5130.TI
8.7 mm
110 gms

41-5132
41-5132.TI
7.4 mm
110 gms

41-5134
41-5134.TI
11.4 mm
110 gms

41-5136
41-5136.TI
11.0 mm
90 gms

Mini



Stainless Steel
Titanium
max. opening
Force

41-5300
41-5300.TI
3.3 mm
50 gms

41-5306
41-5306.TI
4.0 mm
50 gms

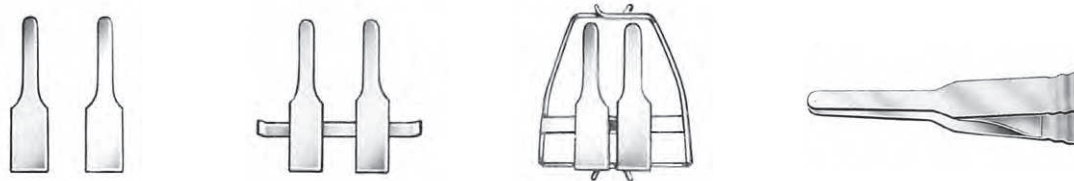
41-5308
41-5308.TI
3.8 mm
50 gms

41-5320
41-5320.TI
4.6 mm
70 gms

41-5322
41-5322.TI
4.4 mm
70 gms

41-5324
41-5324.TI
4.0 mm
70 gms

Micro Vascular Clamps



Plain Fig.	Single Clamps (pair)		Approximator without frame, movable		Approximator with frame, movable		Vessel Size	Length
	A	V	A	V	A	V		
1	75-0397	75-0396	75-0415	75-0414	75-0409	75-0408	0.4 – 1.0 mm	8 mm
2	75-0399	75-0398	75-0417	75-0416	75-0411	75-0410	0.6 – 1.5 mm	11 mm
3	75-0401	75-0400	75-0419	75-0418	75-0413	75-0412	1.0 – 2.2 mm	17 mm
4		75-0325		75-0326			1.5 – 3.5 mm	24 mm
5		75-0286		75-0287			2.0 – 5.0 mm	36 mm
Black								
1	75-0461	75-0462	75-0479	75-0480	75-0473	75-0474	0.4 – 1.0 mm	8 mm
2	75-0463	75-0464	75-0481	75-0482	75-0475	75-0476	0.6 – 1.5 mm	11 mm
3	75-0465	75-0466	75-0483	75-0484	75-0477	75-0478	1.0 – 2.2 mm	17 mm
4		75-0329		75-0330			1.5 – 3.5 mm	24 mm
5		75-0327		75-0328			2.0 – 5.0 mm	36 mm
Applying Forceps								
Fig. 1-2	75-0071 with catch		75-0072 without catch					
Fig. 3-4	75-0073 with catch		75-0074 without catch					

A = for arteries, V = for veins

Biemer

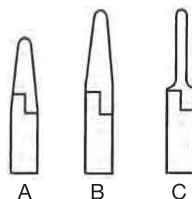


Fig.	Jaw opening mm	Jaw length mm	Closing force g	Vessel Size mm	Art.-No.
A	4.0	6.0	30 – 40	0.5 – 2.0	41-5600
B	5.0	9.0	30 – 40	0.5 – 2.0	41-5602
C	5.0	9.0	20 – 25	0.5 – 2.0	41-5604
Applying Forceps			Fig. A	41-5610 without catch, 14 cm / 5 1/2"	
			Fig. B, C	41-5612 with catch, 14 cm / 5 1/2"	

Mehdorn

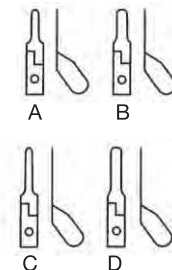


Fig.	Jaw length mm	Closing force g	Vessel Size mm	Art.-No.
A	4.0 x 1.0	10 – 15	0.5 – 1.5	41-5665
B	4.0 x 1.0	15 – 20	0.5 – 1.5	41-5666
C	6.0 x 1.4	10 – 15	0.5 – 1.5	41-5667
D	6.0 x 1.4	15 – 20	0.5 – 1.5	41-5668
Applying Forceps			Fig. A – D	41-5669 without catch, 15 cm / 6"
The position of the clip in the Applying Forceps can be varied.				

Biemer-Mueller

A

B

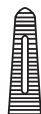
C

D

E



Fig.	Jaw opening mm	Jaw length mm	Closing force g	Vessel Size mm	Art.-No.
A	3.0	4.5	30 – 40	0.5 – 2.0	41-5605
B	5.0	9.0	30 – 40	0.5 – 2.0	41-5606
C	5.0	9.0	30 – 40	0.5 – 2.0	41-5607
D	5.0	9.0	30 – 40	0.5 – 2.0	41-5608
E	5.0	9.0	30 – 40	0.5 – 2.0	41-5609
Applying Forceps			Fig. A	41-5610 without catch, 14 cm / 5 1/2"	
			Fig. B – E	41-5612 with catch, 14 cm / 5 1/2"	



Adson

Dural Needle Holder
with perforated jaw

24-8160 18 cm

Raney

Dural Clip Applying
and Removing Forceps
Clips, stainless

41-7995 16 cm
41-7991 pack of 12 pcs.

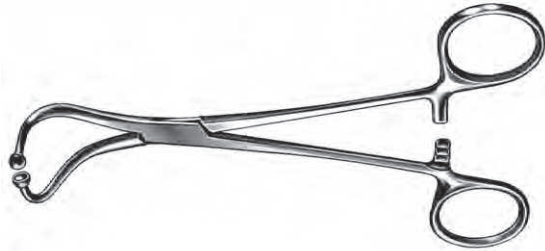
Yasargil-type

Galea Hook

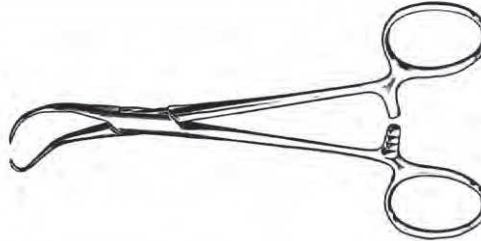
41-7850 31 cm 7 mm
41-7852 41 cm 12 mm

Towel Clamps

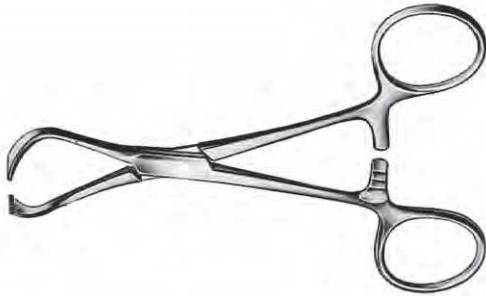
Ball + Socket



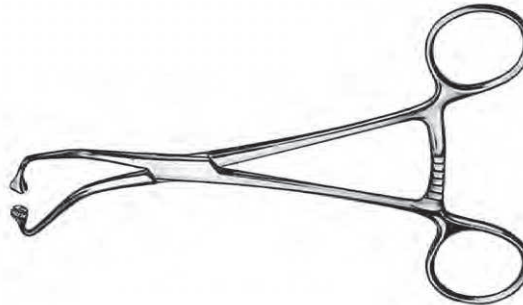
Backhaus



Lorna

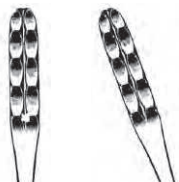


Peers



Length	Ball + Socket	Backhaus
8.0 cm		25-0060
11.0 cm	25-0082	25-0061
13.0 cm	25-0083	25-0062
15.0 cm	25-0085	25-0063
Length	Lorna	Peers
10.0 cm	25-0070	
13.0 cm	25-0071	
14.5 cm		25-0050

Ulrich



**Ulrich
straight**
25-9030
22 cm

25-9031
25 cm

25-9032
27 cm

curved
25-9035
22 cm

25-9036
25 cm

25-9037
27 cm



Scissors



Metzenbaum TC			Nelson Metzenbaum TC				
straight							
26-0100	26-0102	26-0104	26-0106	26-0108	26-0110	26-0112	
14 cm	18 cm	20 cm	23 cm	25 cm	28 cm	30 cm	
Metzenbaum TC			Nelson Metzenbaum TC				
curved							
26-0101	26-0103	26-0105	26-0107	26-0109	26-0111	26-0113	26-0115
14 cm	18 cm	20 cm	23 cm	25 cm	28 cm	30 cm	36 cm
Metzenbaum Fino TC (delicate)							
straight							
26-0120	26-0122	26-0124	26-0126				
14 cm	18 cm	20 cm	23 cm				
curved							
26-0121	26-0123	26-0125	26-0127	26-0129	26-0131		
14 cm	18 cm	20 cm	23 cm	26 cm	28 cm		

Metzenbaum TC

Nelson Metzenbaum TC



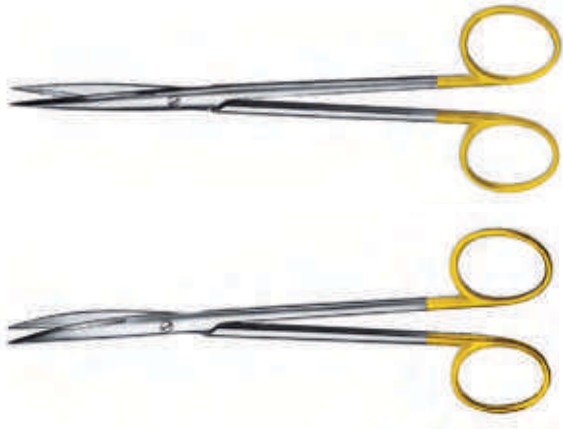
Metzenbaum TC

Nelson Metzenbaum TC

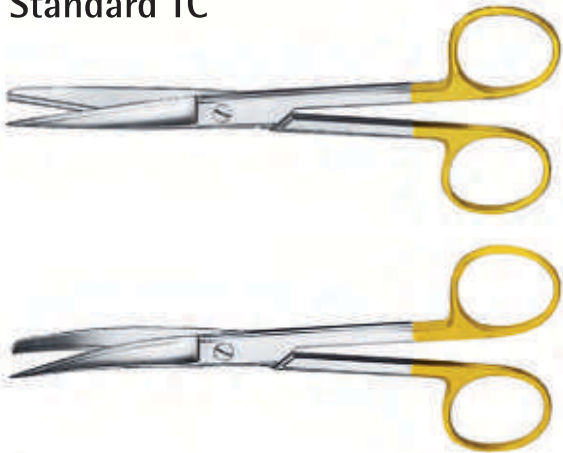


Metzenbaum Fino TC





Standard TC



Metzenbaum-Fino TC pointed

straight

26-0180	26-0182	26-0184	26-0186
14 cm	18 cm	20 cm	23 cm

curved

26-0181	26-0183	26-0185	26-0187
14 cm	18 cm	20 cm	23 cm

Standard TC

straight

26-0010	26-0011	26-0012
14.5 cm	14.5 cm	14.5 cm

curved

26-0013	26-0014	26-0015
14.5 cm	14.5 cm	14.5 cm

**Mayo TC
straight**

26-0020	26-0022	26-0025
14 cm	17 cm	23 cm

curved

26-0021	26-0023	26-0026
14 cm	17 cm	23 cm

**Mayo-Lexer TC
straight**

26-0040	26-0042
16 cm	21 cm

curved

26-0041	26-0043
16 cm	21 cm





Toennis-Adson TC



Ligature TC

Designed for cutting of suture materials.
Wave-cut prevents slipping out.

Toennis-Adson TC

fino

26-0118 17.5 cm

26-0118.23 23.0 cm

superfino

26-0116 17.5 cm

Ligature TC

y-shanks

26-0500 17.5 cm

26-0501 23.0 cm

26-0502 25.0 cm

**Ligature TC
straight shanks**

26-0500G 17.5 cm

26-0501G 23.0 cm

26-0502G 25.0 cm

Iris TC



Universal TC
Wire Cutter



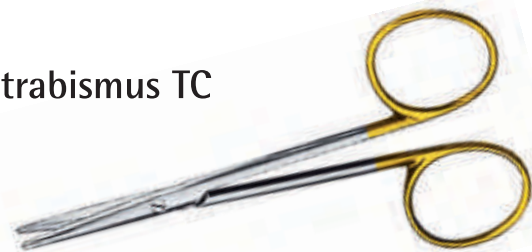
Iris TC
straight **curved**
26-0150 26-0151
11 cm 11 cm

Strabismus TC
straight **curved**
26-0155 26-0156
11 cm 11 cm

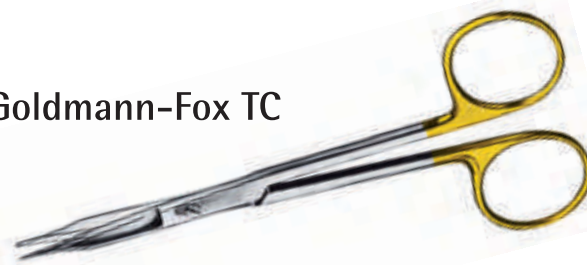
Wire Cutter Universal TC
26-0140
12 cm

Goldmann-Fox TC
straight **curved**
26-0160 26-0161
13 cm 13 cm

Strabismus TC



Goldmann-Fox TC



Metzenbaum



A, straight



B, curved

Metzenbaum Fino



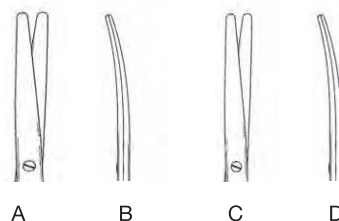
C, straight



D, curved

Swedish Edge™
 = "ST"

■ SC = Super Cut



Metzenbaum

A, straight

26-6190	26-6191	26-6192	26-6193	26-6194	26-6195	26-6196
14 cm	18 cm	20 cm	23 cm	25 cm	28 cm	31 cm

B, curved

26-6200	26-6201	26-6202	26-6203	26-6204	26-6205	26-6206
14 cm	18 cm	20 cm	23 cm	25 cm	28 cm	31 cm

Metzenbaum Fino (delicate)

C, straight

26-6208	26-6210	26-6211	26-6212	26-6213	26-6214
14 cm	18 cm	20 cm	23 cm	25 cm	28 cm

D, curved

26-6209	26-6215	26-6216	26-6217	26-6218	26-6219
14 cm	18 cm	20 cm	23 cm	25 cm	28 cm

Also available with Supercut on request (add "SC" behind the article no.)
 and with Swedish Edge (add "ST" behind the article no.).

Mayo**Mayo
straight**

26-6100	26-6102	26-6104	26-6106	26-6108
14.5 cm	15.5 cm	17 cm	21 cm	23 cm

curved

26-6110	26-6112	26-6114	26-6116	26-6118
14.5 cm	15.5 cm	17 cm	21 cm	23 cm



Reynolds

Jameson (delicate tip)
curved

Ragnell-Kilner

curved

Standard

straight, curved



A



B



C

Reynolds, curved regular tip

26-6250 13.5 cm 26-6252 15 cm

26-6254 18 cm 26-6256 20 cm

26-6258 23 cm 26-6239 15 cm

26-6255 18 cm

Ragnell-Kilner, curved

26-6170 12.5 cm 26-6172 15 cm

26-6174 18 cm 26-6176 20 cm

Standard, straight

	10.5 cm	11.5 cm	13.0 cm	14.5 cm	15.5 cm	16.5 cm	17.5 cm	18.5 cm	20.0 cm
A	26-6020	26-6022	26-6024	26-6026	26-6028	26-6030	26-6032	26-6034	26-6036
B	26-6040	26-6042	26-6044	26-6046	26-6048	26-6050	26-6052	26-6054	26-6056
C	26-6060	26-6062	26-6064	26-6066	26-6068	26-6070	26-6072	26-6074	26-6076

Standard, curved

	10.5 cm	11.5 cm	13.0 cm	14.5 cm	15.5 cm	16.5 cm	17.5 cm	18.5 cm	20.0 cm
A	26-6021	26-6023	26-6025	26-6027	26-6029	26-6031	26-6033	26-6035	26-6037
B	26-6041	26-6043	26-6045	26-6047	26-6049	26-6051	26-6053	26-6055	26-6057
C	26-6061	26-6063	26-6065	26-6067	26-6069	26-6071	26-6073	26-6075	26-6077

Also available with Supercut on request (add "SC" behind the article no.)

Dissecting Scissors

Deaver



26-6875



26-6876

sharp/blunt

26-6875 14.5 cm straight

26-6876 14.5 cm curved

sharp/sharp (not illustrated)

26-6873 14.5 cm straight

26-6874 14.5 cm curved

Schmieden-Taylor



Frazier



Strully



Strully
with ball



Schmieden-Taylor
26-4210 15.5 cm

Frazier
26-4199 17 cm

Strully
26-4200 20 cm

Strully with ball
26-4201 20 cm

Scalpel Handles and Blade Breakers



12.5 cm
16-0003

long 21 cm
16-0023



12.5 cm
16-0013
with scala



16 cm
16-0007

short 12.5 cm
16-0017



15.5 cm
16-0033

10.5 cm
16-0033.10



18 cm
03-0285



for scalpel blades
41-6019 21 cm

for micro blades
41-6012 21 cm
41-6014 25 cm



Microsurgical Knife



Art.-No.

- | | |
|------------|--|
| 16-2070 | 15° Microsurgical knife, blade/tip pack of 6 pieces, sterile |
| 16-2075 | Crescent Microsurgical knife, straight 2 mm, blade/tip pack of 6 pieces, sterile |
| 16-0031 | Handle for disposable knives, 18 cm Aluminium |
| 16-0032 | Fairgrip™ultra Handle for disposable knives, 18 cm, Aluminium |
| 16-0030 | Handle for disposable knives, 18 cm stainless steel |
| 16-0030.DF | PANDOR™ Handle for disposable knives, 18 cm, stainless steel |
| 16-5050 | Handle for disposable knives, 9.5 cm |

Gigli

Wire Saw Handle
26-9109



Gigli

Wire Saw
26-9110 30 cm/12"
26-9111 40 cm/16"
26-9112 50 cm/20"
26-9113 60 cm/24"
26-9114 70 cm/28"



Toennis

Dura Knife
16-1005 19 cm



Redon Needle

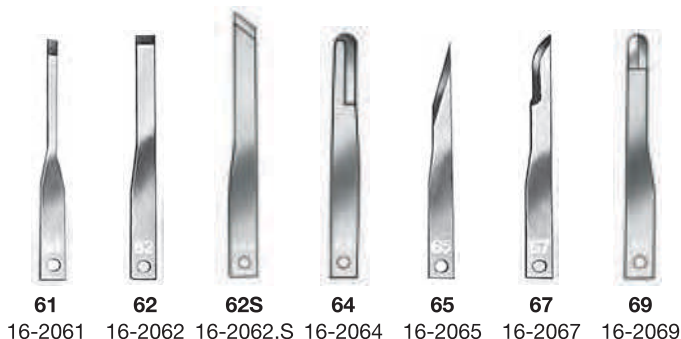
Ch. 8 18-9800.08
Ch. 10 18-9800.10
Ch. 12 18-9800.12
Ch. 14 18-9800.14
Ch. 16 18-9800.16
Ch. 18 18-9800.18

Gigli

Introducer Guide
26-9105 33 cm



Micro Blades



61 16-2061 62 16-2062 62S 16-2062.S 64 16-2064 65 16-2065 67 16-2067 69 16-2069

pack of 10 pcs., sterile

Scalpel Blades



10 16-2010 11 16-2011 12 16-2012 12D 16-2012.D 13 16-2013 15 16-2015

pack of 100 pcs., sterile

Drills and Burrs

39-4001 Cerebellar Extension

Hudson

39-4000.GC
Brace Handle
with snap-lock chuck

Hudson

39-4000
Brace 27 cm,
complete set

consting of: each pieces 39-4000.GC,
39-4001, 39-4002 - 39-4005



Hudson

Cranial Drill/Trepan

39-4009 Adson Drill, 2 mm
39-4018 Mc Kenzie Perforator Drill, 13 mm
39-4019 D'Errico Enlarging Burr, 17 mm



39-4005	39-4017	39-4016	39-4004	39-4015	39-4012	39-4011	39-4010	39-4003	39-4002
Hudson	Cushing	Cushing	Hudson	Cushing	Cushing	Cushing	Cushing	Hudson	Hudson
22 mm	20 mm	15 mm	16 mm	10 mm	14 mm	13 mm	10 mm	14 mm	9 mm

Needle Holders



DeBakey

Mayo-Hegar

Micro-Vascular

Crile-Wood


see page 220

Mayo-Hegar

Fig.	Art.-No.	length mm / "	Insert / Tip
C	24-0129	140 / 5 ½	(N) 2,0 mm
C	24-0130	160 / 6 ¼	(N) 2,5 mm
C	24-0131	180 / 7	(N) 2,7 mm
C	24-0132*	200 / 8	(N) 2,7 mm
C	24-0133	240 / 9 ¼	(N) 2,7 mm
C	24-0134	260 / 10 ¼	(N) 2,7 mm
C	24-0135	300 / 12	(N) 2,7 mm

Titanium

Fig.	Art.-No.	length mm / "	Insert / Tip
A	24-0130.Ti	160 / 6 ¼	(N) 2,5 mm
A	24-0131.Ti	180 / 7	(N) 2,7 mm
A	24-0132.Ti	200 / 8	(N) 2,7 mm

DeBakey

Fig.	Art.-No.	length mm / "	Insert / Tip
A	24-0360*	180 / 7	(F) 1,5 mm
A	24-0361	200 / 8	(F) 1,5 mm
A	24-0362	230 / 9	(F) 1,5 mm
A	24-0363	260 / 10 ¼	(F) 1,5 mm
A	24-0364	300 / 12	(F) 1,5 mm

Titanium

Fig.	Art.-No.	length mm	Insert / Tip
A	24-0360.Ti	180 / 7	(F) 1,5 mm
A	24-0361.Ti	200 / 8	(F) 1,5 mm
A	24-0363.Ti	250 / 10	(F) 1,9 mm

Crile-Wood

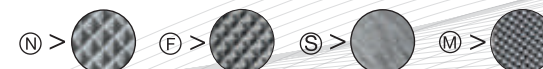
Fig.	Art.-No.	length mm / "	Insert / Tip
D	24-0310	150 / 6	(F) 2 mm
D	24-0311*	180 / 7	(F) 2 mm
D	24-0312	200 / 8	(F) 2 mm
D	24-0313	230 / 9	(F) 2 mm
D	24-0314	260 / 10 ¼	(F) 2 mm
D	24-0315	300 / 12	(F) 2 mm
D	24-0308	150 / 6	(S) 2 mm

Micro-Vascular

(DeBakey delicate)

Fig.	Art.-No.	length mm / "	Insert / Tip
B	24-0350*	150 / 6	(M) 1,2 mm
B	24-0351	180 / 7	(M) 1,2 mm
B	24-0352	200 / 8	(M) 1,2 mm
B	24-0353	230 / 9	(M) 1,2 mm

* bold = shown



French-Eye (Ryder)

Neurosurgical

Lemmon

Mini-Ryder

Intracardiac

Eufrate-Pasqué



Neurosurgical

(French Eye (Ryder) delicate)



Fig.	Art.-No.	length mm / "	Insert / Tip
A	24-0346	130 / 5	Ⓕ 1,7 mm
A	24-0348*	130 / 5	Ⓖ 1,7 mm
A	24-0347	150 / 6	Ⓕ 1,7 mm
A	24-0349	150 / 6	Ⓖ 1,7 mm

French-Eye (Ryder)



Fig.	Art.-No.	length mm / "	Insert / Tip
B	24-0341	160 / 6 ¼	Ⓕ 2,1 mm
B	24-0342	180 / 7	Ⓕ 2,1 mm
B	24-0343*	200 / 8	Ⓕ 2,1 mm
B	24-0344	240 / 9 ½	Ⓕ 2,1 mm
B	24-0345	260 / 10 ¼	Ⓕ 2,1 mm

Mini-Ryder



Fig.	Art.-No.	length mm / "	Insert / Tip
C	24-0410	130 / 5	Ⓜ 1,2 mm
C	24-0412	150 / 6	Ⓜ 1,2 mm
C	24-0413	180 / 7	Ⓜ 1,2 mm
C	24-0414*	200 / 8	Ⓜ 1,2 mm
C	24-0415	230 / 9	Ⓜ 1,2 mm

Titanium

Fig.	Art.-No.	length mm / "	Insert / Tip
C	24-0410.TI	130 / 5	Ⓜ 1,2 mm
C	24-0412.TI	160 / 6 ¼	Ⓜ 1,8 mm
C	24-0413.TI	180 / 7	Ⓜ 1,8 mm
C	24-0414.TI	200 / 8	Ⓜ 1,8 mm

* bold = shown



see page 220

Lemmon



Fig.	Art.-No.	length mm / "	Insert / Tip
D	24-0400	145 / 5 ½	Ⓜ 1,6 mm
D	24-0401*	170 / 6 ½	Ⓜ 1,6 mm
D	24-0402	195 / 7 ½	Ⓜ 1,6 mm

Eufrate-Pasqu



Fig.	Art.-No.	length mm / "	Insert / Tip
E	24-0444	140 / 5 ½	Ⓜ 1,2 mm
E	24-0445	150 / 6	Ⓜ 1,2 mm
E	24-0446*	180 / 7	Ⓜ 1,2 mm
E	24-0447	200 / 8	Ⓜ 1,2 mm
E	24-0439	140 / 5 ½	Ⓖ 1,2 mm
E	24-0440	150 / 6	Ⓖ 1,2 mm
E	24-0441	180 / 7	Ⓖ 1,2 mm
E	24-0442	200 / 8	Ⓖ 1,2 mm

Intracardiac



Fig.	Art.-No.	length mm / "	Insert / Tip
F	24-0322*	180 / 7	Ⓕ 1,7 mm
F	24-0323	200 / 8	Ⓕ 1,7 mm
F	24-0324	230 / 9	Ⓕ 1,7 mm
F	24-0325	260 / 10 ¼	Ⓕ 1,7 mm

SAPPHIRE™  Enhanced Needle Grip Surface



(N)



(F)



(M)



Needle Holders

Giannini

Giannini Heavy

Castroviejo

Diethrich Ryder

Castroviejo / Hepp-Scheidel



see page 220



Diethrich Ryder

Fig.	Art.-No.	length mm / "	Insert / Tip
D	24-0420	150 / 6	Ⓜ 1,2 mm
D	24-0421	180 / 7	Ⓜ 1,2 mm
D	24-0422	200 / 8	Ⓜ 1,2 mm
D	24-0423*	230 / 9	Ⓜ 1,2 mm
D	24-0424	250 / 10	Ⓜ 1,2 mm



Giannini Heavy



Fig.	Art.-No.	length mm / "	Insert / Tip
A	24-0258*	260 / 10 ¼	Ⓟ 1,9 mm

Giannini



Fig.	Art.-No.	length mm / "	Insert / Tip
B	24-0255*	240 / 9 ½	Ⓜ 1,3 mm

Castroviejo / Hepp-Scheidel



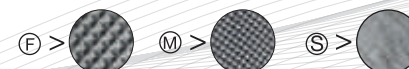
Fig.	Art.-No.	length mm / "	Insert / Tip
C	24-0250	130 / 5	Ⓢ 1,2 mm
C	24-0252	130 / 5	Ⓜ 1,2 mm
C	03-0270*	180 / 7	Ⓜ 1,2 mm

Castroviejo

Fig.	Art.-No.	length mm / "	Insert / Tip
E	24-0200	145 / 5 ¾	Ⓢ 1,2 mm
E	24-0220	145 / 5 ¾	Ⓜ 1,2 mm
F	24-0201	145 / 5 ¾	Ⓢ 1,2 mm
F	24-0221	145 / 5 ¾	Ⓜ 1,2 mm
E	24-0204	180 / 7	Ⓢ 1,2 mm
E	24-0224	180 / 7	Ⓜ 1,2 mm
F	24-0205	180 / 7	Ⓢ 1,2 mm
F	24-0225	180 / 7	Ⓜ 1,2 mm
E	24-0208	220 / 8	Ⓢ 1,2 mm
E	24-0228*	220 / 8	Ⓜ 1,2 mm
F	24-0209	220 / 8	Ⓢ 1,2 mm
F	24-0229	220 / 8	Ⓜ 1,2 mm



* bold = shown





Mathieu

Mathieu
rec. ratchet

Zweifel



A

Zweifel

Fig.	Art.-No.	length mm / "	Insert / Tip
A	24-0050*	200 / 8	Ⓝ 2,9 mm



B

Mathieu

Fig.	Art.-No.	length mm / "	Insert / Tip
B	24-0040	140 / 5 ½	ⓕ 2,4 mm
B	24-0041	170 / 6 ½	Ⓝ 2,4 mm
B	24-0042*	200 / 8	Ⓝ 2,4 mm



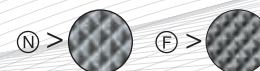
C

Mathieu

rec. ratchet

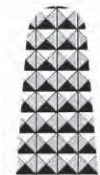
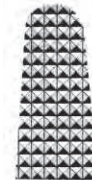
Fig.	Art.-No.	length mm / "	Insert / Tip
C	24-0046	170 / 6 ½	Ⓝ 2,9 mm
C	24-0047*	200 / 8	Ⓝ 2,9 mm
C	24-0048	230 / 9	ⓕ 2,9 mm

* bold = shown



TC-Insert Styles

Serration pitch



(S) Smooth
0 teeth PSI

(M) Micro
16000 teeth PSI
0.2 – 0.3 mm

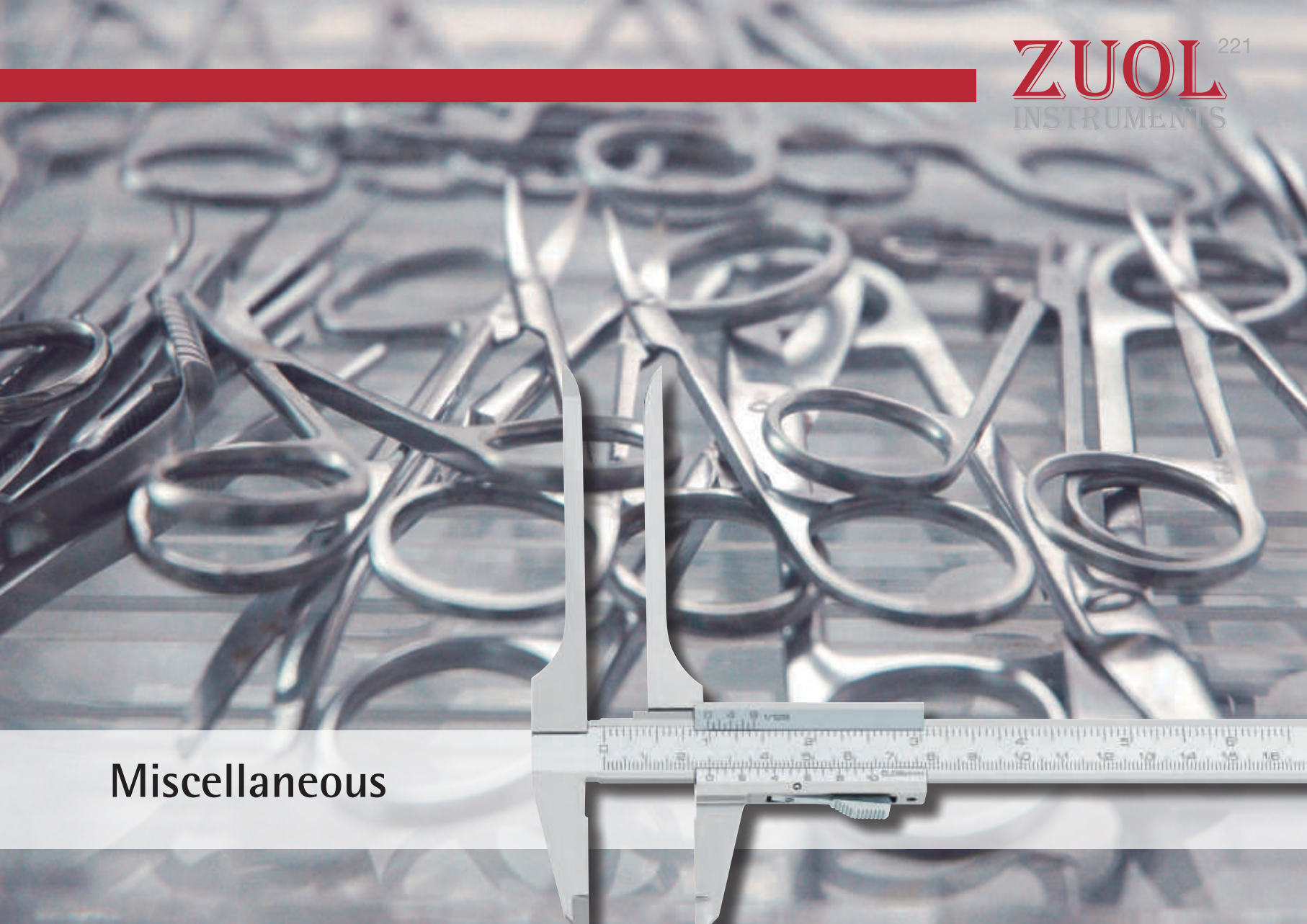
(F) Fine
4000 teeth PSI
0.4 mm

(N) Standard
2600 teeth PSI
0.5 mm

(C) Coarse
1500 teeth PSI
0.65 mm

[illegible]

Miscellaneous



Yasargil-type

18-1002	13 cm	1.5 mm
18-1004	15 cm	1.5 mm
18-1006	18 cm	1.5 mm
18-1008	22 cm	1.5 mm

18-1012	13 cm	2.0 mm
18-1014	15 cm	2.0 mm
18-1016	18 cm	2.0 mm
18-1018	22 cm	2.0 mm

18-1022	13 cm	2.5 mm
18-1024	15 cm	2.5 mm
18-1026	18 cm	2.5 mm
18-1028	22 cm	2.5 mm

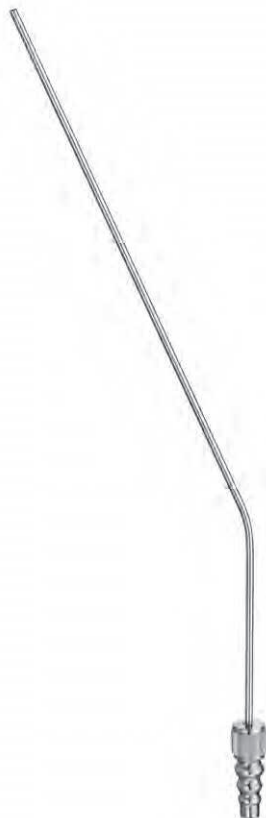
18-1032	13 cm	3.5 mm
18-1034	15 cm	3.5 mm
18-1036	18 cm	3.5 mm
18-1038	22 cm	3.5 mm
18-1046	18 cm	4.5 mm

Elsberg

18-4300	5 Fr.	13 cm
18-4301	7 Fr.	13 cm
18-4302	9 Fr.	13 cm

Heparin

18-0099	45 mm	Ø 2.0 mm
18-0100	45 mm	Ø 3.0 mm
18-0102	55 mm	Ø 3.7 mm
18-0104	160 mm	Ø 5.0 mm



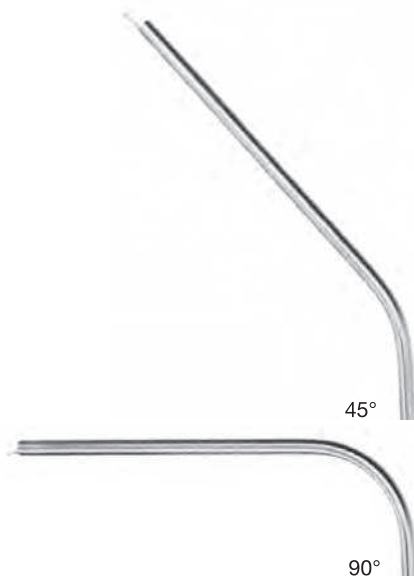
Yasargil-type
Suction Tube



Elsberg
Cannula



Heparin
Flushing Needle


**Frazier
straight**

18-4020	17 cm	Ø 2.0 mm
18-4021	17 cm	Ø 2.7 mm
18-4022	17 cm	Ø 3.3 mm
18-4023	17 cm	Ø 4.0 mm

45°

18-4040	17 cm	Ø 2.0 mm
18-4041	17 cm	Ø 2.7 mm
18-4042	17 cm	Ø 3.3 mm
18-4043	17 cm	Ø 4.0 mm
18-4044	17 cm	Ø 5.0 mm

90°

18-4060	17 cm	Ø 2.0 mm
18-4061	17 cm	Ø 2.7 mm
18-4062	17 cm	Ø 3.3 mm
18-4063	17 cm	Ø 4.0 mm

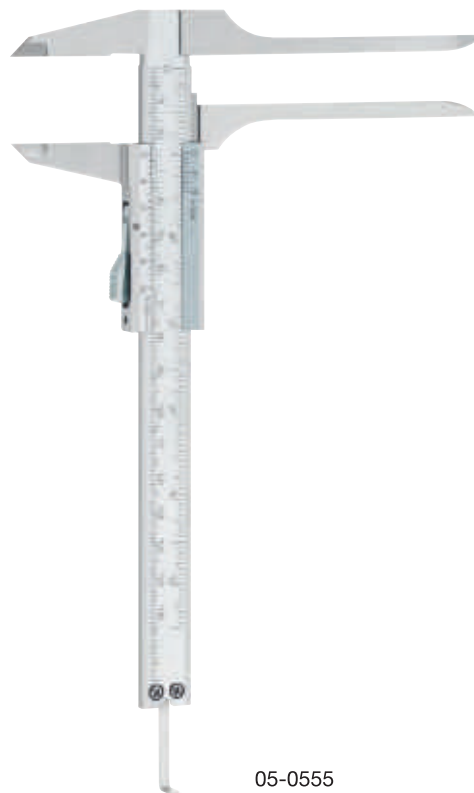
Frazier
 straight

Fukushima
Fukushima

 Suction Tube, conical, malleable,
 with finger cut-off and stylet

			Working- length	length
18-1104	4 Fr.	Ø 1.4 mm	100 mm	165 mm
18-1105	5 Fr.	Ø 1.7 mm	100 mm	165 mm
18-1106	6 Fr.	Ø 2.0 mm	100 mm	165 mm
18-1107	7 Fr.	Ø 2.3 mm	100 mm	165 mm
18-1108	8 Fr.	Ø 2.7 mm	100 mm	165 mm
18-1109	9 Fr.	Ø 3.0 mm	100 mm	165 mm
18-1114	4 Fr.	Ø 1.4 mm	115 mm	180 mm
18-1115	5 Fr.	Ø 1.7 mm	115 mm	180 mm
18-1116	6 Fr.	Ø 2.0 mm	115 mm	180 mm
18-1117	7 Fr.	Ø 2.3 mm	115 mm	180 mm
18-1118	8 Fr.	Ø 2.7 mm	115 mm	180 mm
18-1119	9 Fr.	Ø 3.0 mm	115 mm	180 mm
18-1124	4 Fr.	Ø 1.4 mm	140 mm	205 mm
18-1125	5 Fr.	Ø 1.7 mm	140 mm	205 mm
18-1126	6 Fr.	Ø 2.0 mm	140 mm	205 mm
18-1127	7 Fr.	Ø 2.3 mm	140 mm	205 mm
18-1128	8 Fr.	Ø 2.7 mm	140 mm	205 mm
18-1129	9 Fr.	Ø 3.0 mm	140 mm	205 mm
18-1134	4 Fr.	Ø 1.4 mm	165 mm	230 mm
18-1135	5 Fr.	Ø 1.7 mm	165 mm	230 mm
18-1136	6 Fr.	Ø 2.0 mm	165 mm	230 mm
18-1137	7 Fr.	Ø 2.3 mm	165 mm	230 mm
18-1138	8 Fr.	Ø 2.7 mm	165 mm	230 mm
18-1139	9 Fr.	Ø 3.0 mm	165 mm	230 mm

Neuro-Caliper



05-0555

Pattie Tray



Solution Bowl



For container see our special catalog
Trays and Containers.

Neuro-Caliper

20 cm 12.5 cm scale 05-0555

Pattie Tray

120 mm x 80 mm x 13 mm 77-9190

Solution Bowl

Height cm/''	Ø cm/''	Capacity l	Art.-No.
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6.5/2 ¹ / ₄	10.0/4	0.3	77-9097
7.0/2 ¹ / ₂	12.0/4 ¹ / ₂	0.4	77-9098

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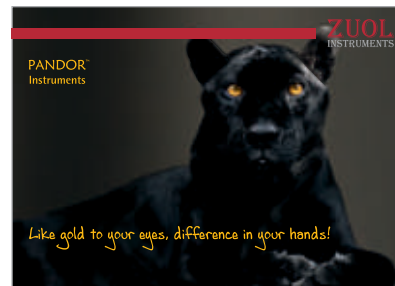
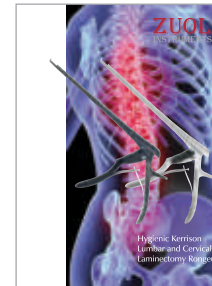
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Conversion scale

To Convert From	To	Multiply By
Ounces (AVDP.)	Grams	28.349
Ounces (APOTH.)	Grams	31.103
Grains	Grams	0.065
Pounds (AVDP.)	Kilograms	0.454
Inches	Centimeters	2.54
Feet	Meters	0.305
Yards	Meters	0.914
Ounces (U.S. Fluid)	Cubic Centimeters	29.574
Ounces (British Fluid)	Cubic Centimeters	28.414
Quarts (U.S. Fluid)	Liters	0.946
Cubic Inches	Cubic Centimeters	16.387
Grams	Grains	15.432
Grams	Ounces (AVDP.)	0.035
Grams	Ounces (APOTH.)	0.032
Kilograms	Pounds (AVDP.)	2.205
Millimeters	Inches	0.039
Centimeters	Inches	0.394
Meters	Feet	3.281
Cubic Centimeters	Cubic Inches	0.061
Cubic Centimeters (Fluid)	Ounces (U.S. Fluid)	0.034
Liters	Quarts (U.S. Fluid)	1.057

Comparative scales or gauges

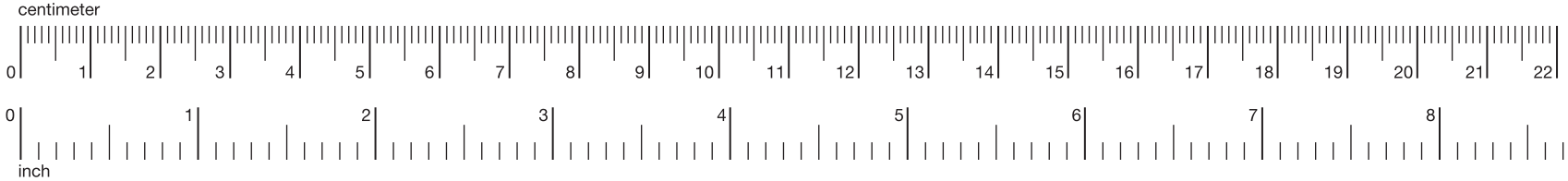
For Measuring the Diameter of Catheters, Sounds and Bougies

Diameters in				Diameters in			
Millimeters	American	French	English	Millimeters	American	French	English
1-3	—	1	—	7	14	21	—
1-2	1	—	—	7 1-3	—	22	12
2-3	—	2	—	7 1-2	15	—	—
1	2	3	—	7 2-3	—	23	13
1 1-3	—	4	—	8	16	24	—
1 1-2	3	—	—	8 1-3	—	25	14
1 2-3	—	5	—	8 1-2	17	—	—
2	4	6	—	8 2-3	—	26	15
2 1-63	—	7	1	9	18	27	16
2 1-2	5	—	—	9 1-3	—	28	17
2 2-3	—	8	2	9 1-2	19	—	—
3	6	9	3	9 2-3	—	29	—
3 1-3	—	10	—	10	20	30	18
3 1-2	7	—	—	10 1-3	—	31	19
3 2-3	—	11	4	10 1-2	21	—	—
4	8	12	5	10 2-3	—	32	20
4 1-3	—	13	—	11	22	33	21
4 1-2	9	—	—	11 1-3	—	34	22
4 2-3	—	14	—	11 1-2	23	—	—
5	10	15	6	11 2-3	—	35	23
5 1-3	—	16	7	12	24	36	24
5 1-2	11	—	—	12 1-3	—	37	25
5 2-3	—	17	8	12 1-2	25	—	—
6	12	18	9	12 2-3	—	38	26
6 1-3	—	19	10	13	26	39	27
6 1-2	13	—	—	13 1-3	—	40	28
6 2-3	—	20	11				

Popular Instrument lengths approximate conversion

Inches	Centimeters (rounded)
1	2.5 cm
1 1/4	3 cm
1 1/2	4 cm
1 3/4	4.5 cm
2	5 cm
2 1/4	5.5 cm
2 1/2	6.5 cm
2 3/4	7 cm
3	7.5 cm
3 1/2	9 cm
4	10 cm
4 1/2	11.5 cm
4 3/4	12 cm
5	12.5 cm
5 1/2	14 cm
5 3/4	14.5 cm

Inches	Centimeters (rounded)
6	15 cm
6 1/2	16.5 cm
6 3/4	17 cm
7	18 cm
7 1/4	18.5 cm
7 1/2	19 cm
7 3/4	19.5 cm
8	20.5 cm
8 1/2	21.5 cm
8 3/4	22 cm
9	23 cm
9 1/2	24 cm
10	25.5 cm
10 1/2	26.5 cm
11	28 cm
11 1/2	29 cm
12	30.5 cm



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