



# Laparoscopy

Access, Visualization & Instrumentation

## Our Vision

"True to our vision **INNOVATING TRADITION**, it has always been our goal to not only provide our customers and healthcare professionals with an industry-leading value proposition through continuous innovation in our products and processes.

# Ackermann

We believe that it is equally important to not lose sight of our roots and to preserve the craftsmanship that has been perfected over generations as an established family business. This enables us to maintain a productive and sustainable home for our staff and to improve clinical outcomes every single day in over 100 countries around the world."

**Peter Grassl, CEO**

## + 20k SKUs

As **Full-Range-System Manufacturer** we are able to provide you with a coherent product portfolio - from endoscopy to ligation, from implantology to general surgery.



# Capabilities

+ Manufacturing

Surgical Instruments, Units, Implants, Optics

+ Regulatory

ISO 13485:2016, US FDA, CFDA, ANVISA,  
COFEPRIS

+ Service

+ R&D



# Global Player

Sales subsidiaries located in  
**Greece, India, USA & Mexico**



Serving over  
**100**  
Countries

More than  
**80**  
Employees



**3**  
Manufacturing  
Sites

**400**  
Strategic  
Partners



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## Basic Lap Set

Ordering Information and Recommendations

1x 4k UHD Laparoscope, 0°, Ø 10 mm, 330 mm	# 11-1130UHD
1x High performance fiber light cable, heat-shielded, Ø 4.8 mm, 3 m	# 11-1161
1x Adaptor scope-side, Ackermann / Storz <sup>1</sup>	# 11-1146-100
1x Adaptor lightsource-side, Ackermann / Storz <sup>1</sup>	# 11-1147-100
3x Threaded silicone valve trocar, demount., carbon fiber, Ø 5.5 mm	# 10-1115THC
3x Pyramidal / triangular tip obturator, Ø 5.5 mm	# 10-1034
2x Threaded silicone valve trocar, demount., carbon fiber, Ø 11 mm	# 10-1116THC
2x Pyramidal / triangular tip obturator, Ø 11 mm	# 10-1044
1x Slide-on reducer, Ø 11 / 12.5 mm to Ø 5.5 mm	# 10-1021-201
1x Reduction sleeve, Ø 11 mm to Ø 5.5 mm	# 10-1075
1x Endoscopic clinch, Ø 5 mm, 330 mm (insert)	# 13-1323XPI
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1x XPress Lock™ handle with universal ratchet	# 13-1368XP
1x Maryland dissecting forceps, Ø 5 mm, 330 mm (insert)	# 13-1318XPI
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Cross-serrated grasping forceps, Ø 5 mm, 330 mm (insert)	# 13-1354XPI
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Johan grasping forceps, Ø 5 mm, 330 mm (insert)	# 13-1312XPI
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1x XPress Lock™ handle w/o ratchet	# 13-1367XP



1x Hook scissors, Ø 5 mm, 330 mm (insert)	# 13-1431XPI
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Metzenbaum scissors, curved, ceramic, Ø 5 mm, 330 mm (insert)	# 13-1461CI
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Maryland grasping forceps, Ø 5 mm, 330 mm (insert)	# 13-1701I
1x Sheath for bipolar detachable instruments, Ø 5 mm, 330 mm	# 13-1700R
1x Handle for bipolar detachable instruments	# 13-1700SI
1x Fenestrated grasping forceps, Ø 5 mm, 330 mm (insert)	# 13-1702I
1x Sheath for bipolar detachable instruments, Ø 5 mm, 330 mm	# 13-1700R
1x Handle for bipolar detachable instruments	# 13-1700SI
1x Micro forceps, Ø 5 mm, 330 mm (insert)	# 13-1703I
1x Sheath for bipolar detachable instruments, Ø 5 mm, 330 mm	# 13-1700R
1x Handle for bipolar detachable instruments	# 13-1700SI
1x Trumpet valve handle incl. Ø 5 mm and Ø 10 mm high-flow tubes	# 11-1235
1x Verres needle, Ø 2 mm, 120 mm	# 10-1105
1x L-Hook electrode, monopolar, Ø 5 mm, 330 mm	# 11-1175
1x Fascia closing suture passer with stop, Ø 3 mm, 180mm	# 10-1114
1x Axial needleholder, right curved jaws, angled handle, Ø 5 mm	# 13-1593P
1x Axial needleholder, left curved jaws, angled handle, Ø 5 mm	# 13-1594P
1x Applicator for medium-large Europclips™, Ø 10 mm, 330 mm	# 13-1615AS
1x Medium-large Europclips™, 120 clips/ per box	# AI74CML6
1x Monopolar cable, Ackermann / Erbe T1/ Martin <sup>1</sup> /Berchthold <sup>1</sup> , 3 m	# 11-1260
1x Bipolar cable, EU flat plug, 2-banana, 3 m	# 13-1641



## Lap Chole Set

Ordering Information and Recommendations

1x 4k UHD Laparoscope, 30°, Ø 10 mm, 330 mm	# 11-1135UHD
1x High performance fiber light cable, heat-shielded, Ø 4.8 mm, 3 m	# 11-1161
1x Adaptor scope-side, Ackermann / Storz <sup>1</sup>	# 11-1146-100
1x Adaptor lightsource-side, Ackermann / Storz <sup>1</sup>	# 11-1147-100
3x Threaded silicone valve trocar, demount., carbon fiber, Ø 5.5 mm	# 10-1115THC
1x Pyramidal / triangular tip obturator, Ø 5.5 mm	# 10-1034
1x Threaded silicone valve trocar, demount., carbon fiber, Ø 11 mm	# 10-1116THC
1x Pyramidal / triangular tip obturator, Ø 11 mm	# 10-1044
1x Slide-on reducer, Ø 11 / 12.5 mm to Ø 5.5 mm	# 10-1021-201
1x Maryland dissecting forceps, Ø 5 mm, 330 mm (insert)	# 13-1318XPI
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Maxi fundus grasping forceps, Ø 5 mm, 330 mm (insert)	# 13-1302XPI
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1x XPress Lock™ handle with universal ratchet	# 13-1368XP
2x Wave grasping forceps DG, double-act., Ø 5 mm, 330 mm (insert)	# 13-1381XPI
2x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
2x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Wave grasping forceps DG, single-act., Ø 5 mm, 330 mm (insert)	# 13-1375XPI
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Mixer clamp, Ø 5 mm, 330 mm (insert)	# 13-1376XPI
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1x XPress Lock™ handle with universal ratchet	# 13-1368XP





1x Retraction forceps, Ø 5 mm, 330 mm (insert)	# 13-1380XPI
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1x XPress Lock™ handle with universal ratchet	# 13-1368XP
1x Hook scissors, Ø 5 mm, 330 mm (insert)	# 13-1431XPI
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Metzenbaum scissors, curved, ceramic, Ø 5 mm, 330 mm (insert)	# 13-1461CI
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Trumpet valve handle incl. Ø 5 mm and Ø 10 mm high-flow tubes	# 11-1235
1x Verres needle, Ø 2 mm, 120 mm	# 10-1105
1x Graduated palpation probe, Ø 5 mm, 330 mm	# 10-1110
1x Spatula electrode, monopolar, Ø 5 mm, 330 mm	# 11-1170
1x L-Hook electrode, monopolar, Ø 5 mm, 330 mm	# 11-1175
1x Fascia closing suture passer with stop, Ø 3 mm , 180mm	# 10-1114
1x Monopolar cable, Ackermann / Erbe T <sup>1</sup> / Martin <sup>1</sup> / Berchthold <sup>1</sup> , 3 m	# 11-1260



# Bariatric Lap Set

Ordering Information and Recommendations

1x 4k UHD Laparoscope, 0°, Ø 10 mm, 450 mm	# 11-1130-45UHD
1x High performance fiber light cable, heat-shielded, Ø 4.8 mm, 3 m	# 11-1161
1x Adaptor scope-side, Ackermann / Storz <sup>1</sup>	# 11-1146-100
1x Adaptor lightsource-side, Ackermann / Storz <sup>1</sup>	# 11-1147-100
3x Plain multifunct. trocar, demount., Ø 5.5 mm, 150 mm	# 10-1002-150
1x Pyramidal / triangular tip obturator, Ø 5.5 mm, 150 mm	# 10-1034-150
1x Plain multifunct. trocar, demount., Ø 11 mm, 150 mm	# 10-1012-150
1x Pyramidal / triangular tip obturator, Ø 11 mm, 150 mm	# 10-1044-150
1x Slide-on reducer, Ø 11 / 12.5 mm to Ø 5.5 mm	# 10-1021-201
1x Reduction sleeve, Ø 11 mm to Ø 5.5 mm	# 10-1075
1x Duval grasping forceps, Ø 10 mm, 450 mm (insert)	# 13-1580XPI-45
1x Sheath for XPress Lock™ inserts, Ø 10 mm, 450 mm	# 13-1357XP-45
1x XPress Lock™ handle with universal ratchet	# 13-1368XP
1x US Babcock grasping forceps, Ø 10 mm, 450 mm (insert)	# 13-1544XPI-45
1x Sheath for XPress Lock™ inserts, Ø 10 mm, 450 mm	# 13-1357XP-45
1x XPress Lock™ handle with universal ratchet	# 13-1368XP
1x Johan grasping forceps, Ø 5 mm, 450 mm (insert)	# 13-1312XPI-45
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 450 mm	# 13-1356XP-45
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Maryland grasping forceps, Ø 10 mm, 450 mm (insert)	# 13-1411XPI-45
1x Sheath for XPress Lock™ inserts, Ø 10 mm, 450 mm	# 13-1357XP-45
1x XPress Lock™ handle with universal ratchet	# 13-1368XP



1x Maxi fundus grasping forceps, Ø 5 mm, 450 mm (insert)	# 13-1302XPI-45
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 450 mm	# 13-1356XP-45
1x XPress Lock™ handle with universal ratchet	# 13-1368XP
1x Endoscopic clinch, Ø 5 mm, 450 mm (insert)	# 13-1323XPI-45
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 450 mm	# 13-1356XP-45
1x XPress Lock™ handle with universal ratchet	# 13-1368XP
1x Hook scissors, Ø 5 mm, 450 mm (insert)	# 13-1431XPI-45
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 450 mm	# 13-1356XP-45
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Metzenbaum scissors, curved, ceramic, Ø 5 mm, 450 mm (insert)	# 13-1461CI-45
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 450 mm	# 13-1356XP-45
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Maryland grasping forceps, Ø 5 mm, 450 mm (insert)	# 13-1701I-45
1x Sheath for bipolar detachable instruments, Ø 5 mm, 450 mm	# 13-1700R-45
1x Handle for bipolar detachable instruments	# 13-1700SI
1x Fenestrated grasping forceps, Ø 5 mm, 450 mm (insert)	# 13-1702I-45
1x Sheath for bipolar detachable instruments, Ø 5 mm, 450 mm	# 13-1700R-45
1x Handle for bipolar detachable instruments	# 13-1700SI
1x Micro forceps, Ø 5 mm, 450 mm (insert)	# 13-1703I-45
1x Sheath for bipolar detachable instruments, Ø 5 mm, 450 mm	# 13-1700R-45
1x Handle for bipolar detachable instruments	# 13-1700SI
3x Trumpet valve handle	# 11-1235-102
1x High-flow tube with drillings, Ø 5 mm, 450 mm	# 11-1235-100-45
1x Verres needle, Ø 2 mm, 120 mm	# 10-1105
1x Esophageal retractor, Ø 10 mm, 330 mm	# 13-1668-10
1x Esophageal retractor, Ø 10 mm, 450 mm	# 13-1668-10-45
1x L-Hook electrode, monopolar, Ø 5 mm, 450 mm	# 11-1175-45



- 1x Fascia closing suture passer with stop, Ø 3 mm , 180mm # 10-1114
- 1x Axial needleholder, right curved, angled handle, Ø 5 mm, 450 mm # 13-1593P-45
- 1x Axial needleholder, left curved, angled handle, Ø 5 mm, 450 mm # 13-1594P-45
- 1x Applicator for medium-large Europclips™, Ø 10 mm, 330 mm # 13-1615AS
- 1x Medium-large Europclips™, 120 clips/ per box # AI74CML6
- 1x Monopolar cable, Ackermann / Erbe T<sup>1</sup>/ Martin<sup>1</sup>/Berchthold<sup>1</sup> , 3 m # 11-1260
- 1x Bipolar cable, EU flat plug, 2-banana , 3 m # 13-1641





# Urology Lap Set

Ordering Information and Recommendations

1 x 4k UHD Laparoscope, 30°, Ø 10 mm, 330 mm	# 11-1135UHD
1 x High performance fiber light cable, heat-shielded, Ø 4.8 mm, 3 m	# 11-1161
1 x Adaptor scope-side, Ackermann / Storz <sup>1</sup>	# 11-1146-100
1 x Adaptor lightsource-side, Ackermann / Storz <sup>1</sup>	# 11-1147-100
3 x Plain silicone valve trocar, demountable, carbon fiber, Ø 5.5 mm	# 10-1115
3 x Pyramidal / triangular tip obturator, Ø 5.5 mm, 150 mm	# 10-1034
2 x Plain silicone valve trocar, demountable, carbon fiber, Ø 11 mm	# 10-1116
2 x Pyramidal / triangular tip obturator, Ø 11 mm, 150 mm	# 10-1044
2 x Plain silicone valve trocar, demountable, carbon fiber, Ø 12.5 mm	# 10-1117
2 x Pyramidal / triangular tip obturator, Ø 11 mm, 150 mm	# 10-1049
2 x Flip-on reducer, Ø 11 mm to Ø 5.5 mm	# 10-1021-101
1 x Slide-on reducer, Ø 11 / 12.5 mm to Ø 5.5 mm	# 10-1021-201
2 x Manhes grasping forceps, Ø 5 mm, 330 mm (insert)	# 13-1326XPI
2 x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
2 x XPress Lock™ handle with universal ratchet	# 13-1368XP
1 x Kelly dissecting forceps, Ø 5 mm, 330 mm (insert)	# 13-1419XPI
1 x Sheath for XPress Lock™ inserts, Ø 10 mm, 330 mm	# 13-1356XP
1 x XPress Lock™ handle w/o ratchet	# 13-1367XP
2 x Dissecting forceps, Ø 5 mm, 330 mm (insert)	# 13-1422XPI
2 x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
2 x XPress Lock™ handle w/o ratchet	# 13-1367XP



1x Dissecting forceps, Ø 10 mm, 330 mm (insert)	# 13-0530XPI
1x Sheath for XPress Lock™ inserts, Ø 10 mm, 330 mm	# 13-1357XP
1x XPress Lock™ handle with universal ratchet	# 13-1368XP
1x Maryland dissecting forceps, Ø 10 mm, 330 mm (insert)	# 13-1340XPI
1x Sheath for XPress Lock™ inserts, Ø 10 mm, 330 mm	# 13-1357XP
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Biopsy spoon forceps, Ø 10 mm, 330 mm (insert)	# 13-1660XPI
1x Sheath for XPress Lock™ inserts, Ø 10 mm, 330 mm	# 13-1357XP
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Metzenbaum scissors, curved, ceramic, Ø 5 mm, 330 mm (insert)	# 13-1461CI
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Maryland grasping forceps, Ø 5 mm, 330 mm (insert)	# 13-1701I
1x Sheath for bipolar detachable instruments, Ø 5 mm, 330 mm	# 13-1700R
1x Handle for bipolar detachable instruments	# 13-1700SI
1x Modular handle for 3 mm / 5 mm / 10 mm suction-irrigation tubes	# 11-1236
1x Standard tube, Ø 5 mm	# 11-1237
1x Verres needle, Ø 2 mm, 120 mm	# 10-1105
1x Axial needleholder, straight jaws, angled handle, Ø 5 mm, 330 mm	# 13-1591P
1x Axial needleholder, self-upright., angled handle, Ø 5 mm, 330 mm	# 13-1590PSFU
1x Monopolar cable, Ackermann / Erbe T <sup>1</sup> / Martin <sup>1</sup> / Berchthold <sup>1</sup> , 3 m	# 11-1260
1x Bipolar cable, EU flat plug, 2-banana, 3 m	# 13-1641



# Gynaecology Lap Set

Ordering Information and Recommendations

1 x 4k UHD Laparoscope, 0°, Ø 10 mm, 330 mm	# 11-1130UHD
1 x High performance fiber light cable, heat-shielded, Ø 4.8 mm, 3 m	# 11-1161
1 x Adaptor scope-side, Ackermann / Storz <sup>1</sup>	# 11-1146-100
1 x Adaptor lightsource-side, Ackermann / Storz <sup>1</sup>	# 11-1147-100
3 x Plain silicone valve trocar, demountable, carbon fiber, Ø 5.5 mm	# 10-1115
3 x Blunt obturator, Ø 5.5 mm	# 10-1034BL
2 x Plain silicone valve trocar, demountable, carbon fiber, Ø 11 mm	# 10-1116
2 x Blunt obturator, Ø 11 mm	# 10-1044BL
1 x Allis grasping forceps, Ø 5 mm, 330 mm (insert)	# 13-1350XPI
1 x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1 x XPress Lock™ handle with universal ratchet	# 13-1368XP
1 x Claw forceps, Ø 5 mm, 330 mm (insert)	# 13-1606XPI
1 x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1 x XPress Lock™ handle with universal ratchet	# 13-1368XP
1 x Johan grasping forceps, Ø 5 mm, 330 mm (insert)	# 13-1312XPI
1 x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1 x XPress Lock™ handle w/o ratchet	# 13-1367XP
1 x Tenaculum grasping forceps, Ø 5 mm, 330 mm (insert)	# 13-1537XPI
1 x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1 x XPress Lock™ handle with universal ratchet	# 13-1368XP
1 x Kelly dissecting forceps, Ø 5 mm, 330 mm (insert)	# 13-1419XPI
1 x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1357XP
1 x XPress Lock™ handle w/o ratchet	# 13-1367XP



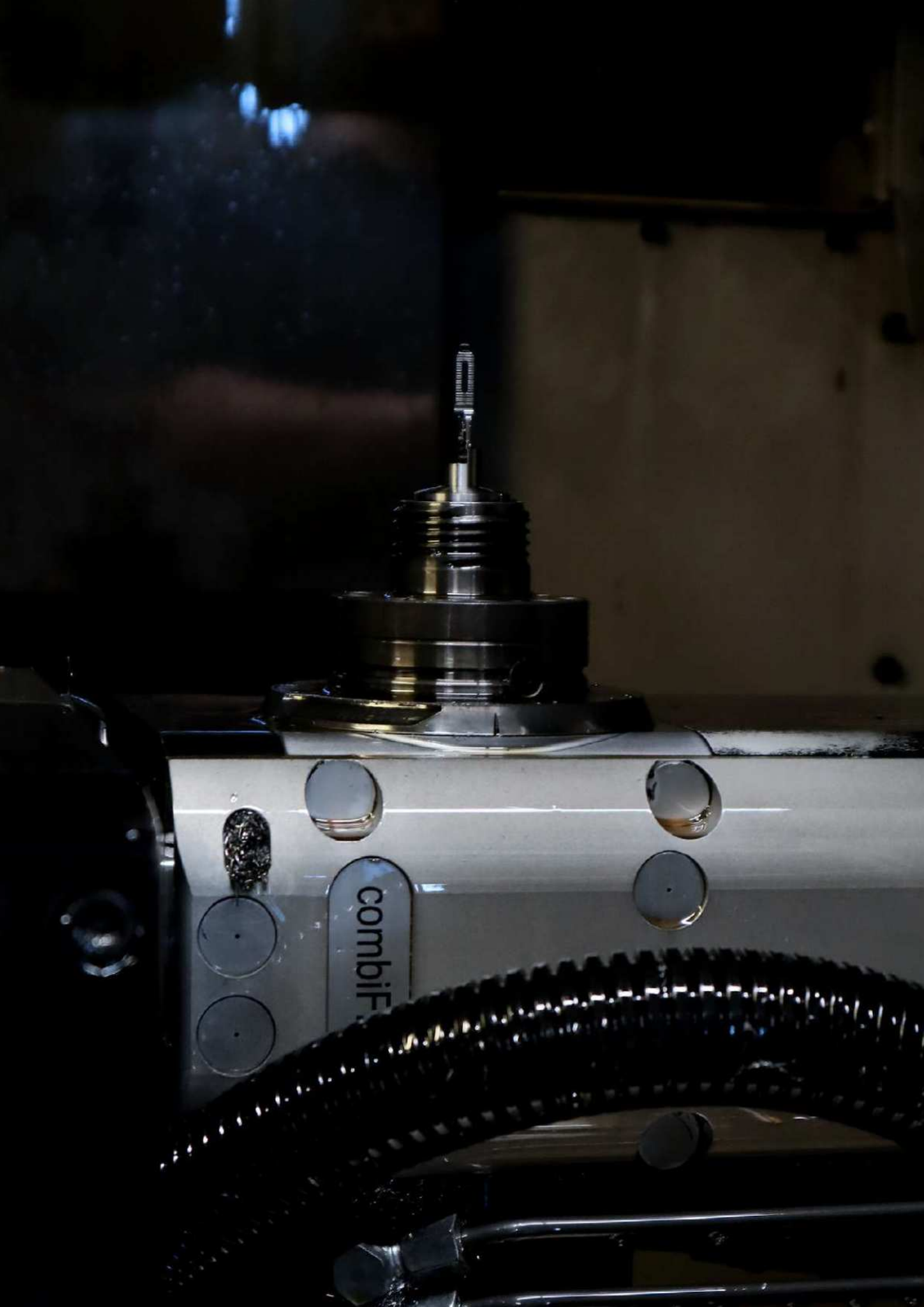


1x Biopsy spoon forceps, Ø 10 mm, 330 mm (insert)	# 13-1660XPI
1x Sheath for XPress Lock™ inserts, Ø 10 mm, 330 mm	# 13-1357XP
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Hook scissors, Ø 5 mm, 330 mm (insert)	# 13-1431XPI
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Metzenbaum scissors, curved, ceramic, Ø 5 mm, 330 mm (insert)	# 13-1461CI
1x Sheath for XPress Lock™ inserts, Ø 5 mm, 330 mm	# 13-1356XP
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Claw forceps, Ø 10 mm, 330 mm (insert)	# 13-1605XPI
1x Sheath for XPress Lock™ inserts, Ø 10 mm, 330 mm	# 13-1357XP
1x XPress Lock™ handle with universal ratchet	# 13-1368XP
1x Maryland grasping forceps, Ø 5 mm, 330 mm (insert)	# 13-1701I
1x Sheath for bipolar detachable instruments, Ø 5 mm, 330 mm	# 13-1700R
1x Handle for bipolar detachable instruments	# 13-1700SI
1x Fenestrated grasping forceps, Ø 5 mm, 330 mm (insert)	# 13-1702I
1x Sheath for bipolar detachable instruments, Ø 5 mm, 330 mm	# 13-1700R
1x Handle for bipolar detachable instruments	# 13-1700SI
1x Fenestrated grasping forceps, curved, Ø 5 mm, 330 mm (insert)	# 13-1706I
1x Sheath for bipolar detachable instruments, Ø 5 mm, 330 mm	# 13-1700R
1x Handle for bipolar detachable instruments	# 13-1700SI
1x Modular handle for 3 mm / 5 mm / 10 mm suction-irrigation tubes	# 11-1236
1x Standard tube, Ø 5 mm	# 11-1237
1x Suction needle, Ø 5 mm	# 11-1237-400
1x Verres needle, Ø 2 mm, 120 mm	# 10-1105
1x Knot pusher, open eyelet, Ø 4 mm, 330 mm	# 13-1617
1x Two-way handle for adaptable suction-irrigation electrodes	# 11-1173



1x L-Hook electrode, adaptable, monopolar, Ø 5 mm, 330 mm	# 11-1179
1x Button electrode, adaptable, monopolar, Ø 5 mm, 330 mm	# 11-1184
1x Needle electrode, adaptable, monopolar, Ø 5 mm, 330 mm	# 11-1200
1x Axial needleholder, right curved, angled handle, Ø 5 mm, 330 mm	# 13-1593P
1x Axial needleholder, left curved, angled handle, Ø 5 mm, 330 mm	# 13-1594P
1x Myoma screw, Ø 5 mm, 380 mm	# 10-1096
1x Uterus manipulator without adapters	# 18-2356
1x Portio adapter, curved, Ø 8 mm / 80 mm	# 18-2356-100
1x Portio adapter, curved, Ø 10 mm / 100 mm	# 18-2356-200
1x Portio adapter, cone shaped, short	# 18-2356-500
1x Portio adapter, cone shaped, long	# 18-2356-600
1x Monopolar cable, Ackermann / Erbe T <sup>1</sup> / Martin <sup>1</sup> /Berchthold <sup>1</sup> , 3 m	# 11-1260
1x Bipolar cable, EU flat plug, 2-banana, 3 m	# 13-1641





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# Access Instrumentation

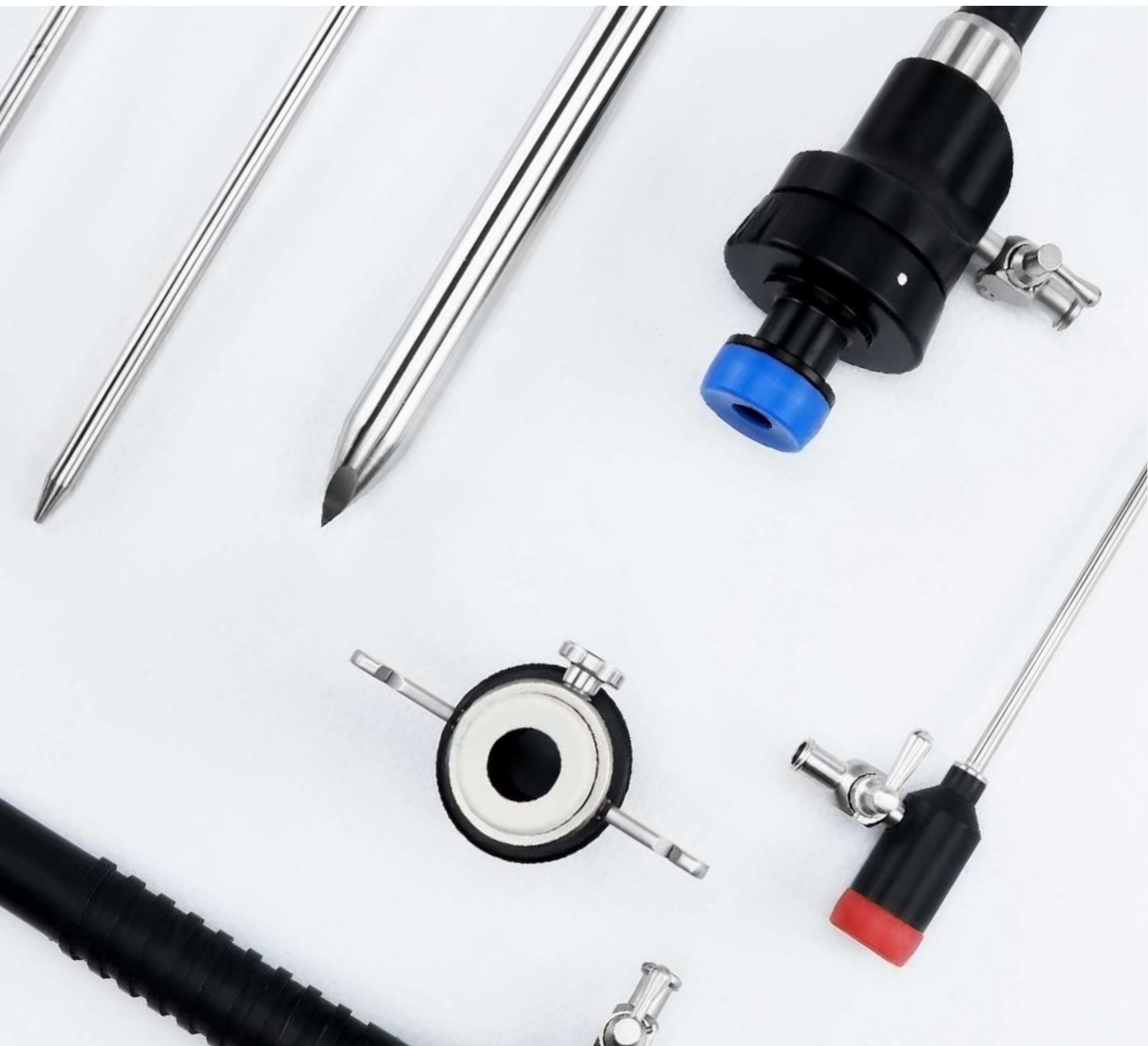
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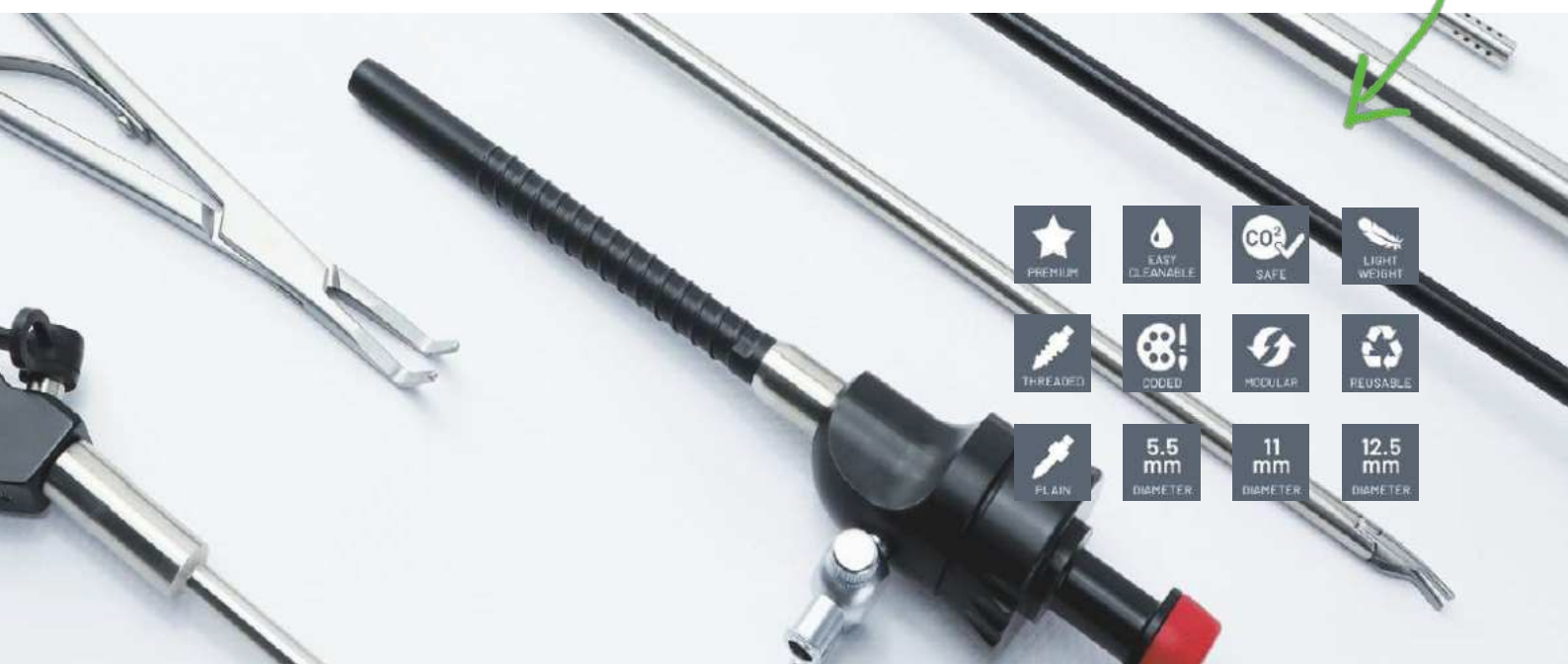




# Silicone Valve Trocars

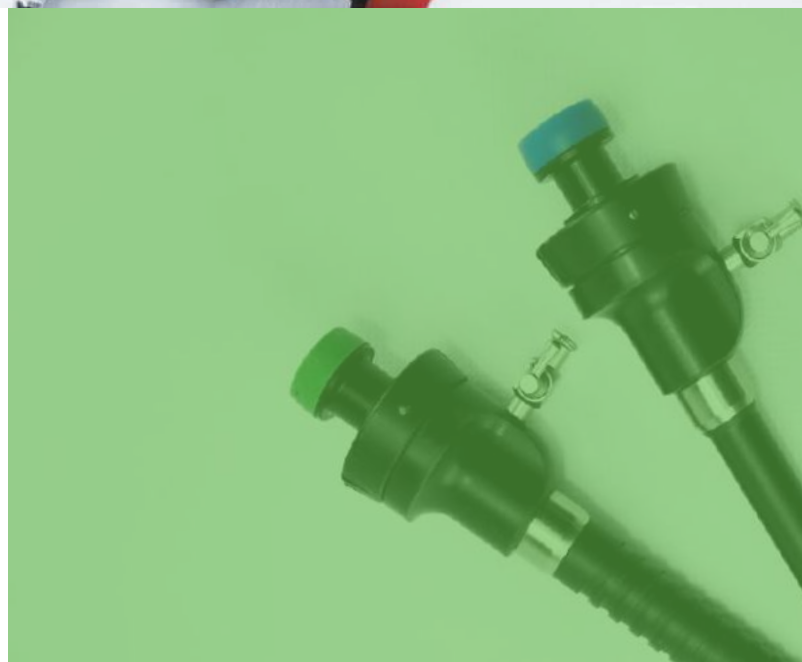
## Key Features

- Silicone valve trocar **weights less than 40 g**
- Maintenance-free **silicone valve**
- **Less damage** of scope and instrument tip due to less instrument friction
- **Excellent tactile feedback** when inserting into the abdominal cavity
- Available on request with 150 mm WL for **bariatric procedures**
- **Safe CO<sup>2</sup> sealing**



## ... more Features

- Trocars made of ultra light-weight reinforced carbon fiber
- With threaded or plain cannula
- Ergonomic design with LL stopcock
- Easy cleaning due to demountability
- Bayonet locking for easy valve exchange
- Color-coded sealing cap
- Diameters of 5.5 mm, 11 mm and 12.5 mm available
- + Available without luer-lock on request



## Silicone Valve Trocars, Threaded Cannula



	Diameter			Working length		Color coding	Item no.
	Ø 5.5 mm	Ø 11 mm	Ø 12.5 mm	95 mm	105 mm		
Threaded silicone valve trocar, demountable, carbon fiber	•			•		●	10-1115THC
Threaded silicone valve trocar, demountable, carbon fiber		•			•	●	10-1116THC
Threaded silicone valve trocar, demountable, carbon fiber			•		•	●	10-1117THC

## Silicone Valve Trocars, Plain Cannula



	Diameter			Working length			Color coding	Item no.
	Ø 5.5 mm	Ø 11 mm	Ø 12.5 mm	95 mm	98 mm	101 mm		
Plain silicone valve trocar, demountable, carbon fiber	•			•			●	10-1115
Plain silicone valve trocar, demountable, carbon fiber		•			•		●	10-1116
Plain silicone valve trocar, demountable, carbon fiber			•		•		●	10-1117

# Multifunctional Trocars

## Key Features

- Trocars made of **high-quality stainless steel**
- **Robust design** with LL stopcock
- Model with traditional **multifunctional trap door valve**
- Available on request with 150 mm WL for **bariatric procedures**



## ... more Features

- Available with plain and threaded cannula
- Easy cleaning due to demountability
- Color-coded sealing cap
- Diameters of 5.5 mm, 11 mm and 12.5 mm available
- Fully modular



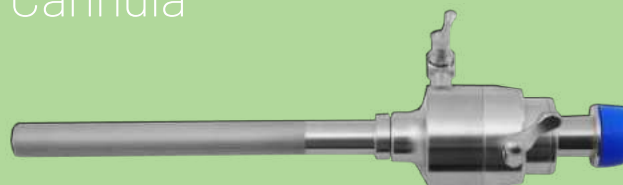


## Multifunctional Trocars, Threaded Cannula



	Diameter			Working length			Color coding	Item no.
	Ø 5.5 mm	Ø 11 mm	Ø 12.5 mm	95 mm	105 mm			
<b>Threaded multifunct. trocar</b> , demountable, stainless steel	•			•			●	10-1002THC
<b>Threaded multifunct. trocar</b> , demountable, stainless steel		•			•		●	10-1012THC
<b>Threaded multifunct. trocar</b> , demountable, stainless steel			•		•		●	10-1012-12,5THC

## Multifunctional Trocars, Plain Cannula

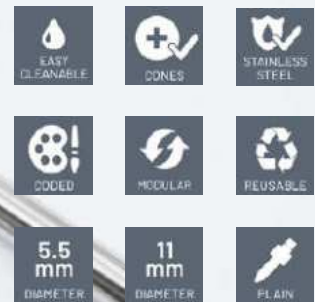


	Diameter			Working length			Color coding	Item no.
	Ø 5.5 mm	Ø 11 mm	Ø 12.5 mm	95 mm	98 mm	101 mm		
<b>Plain multifunct. trocar</b> , demountable, stainless steel	•			•			●	10-1002
<b>Plain multifunct. trocar</b> , demountable, stainless steel		•			•		●	10-1012
<b>Plain multifunct. trocar</b> , demountable, stainless steel			•		•		●	10-1012-12,5

# Hasson Trocars

## Key Features

- Model used for **half-open technique** when inserting the first trocar **under direct vision**
- Preferred use with patients who had **prior abdominal surgical procedures** and may have tissue adhering to the abdominal wall
- **Additional cones** of different types available

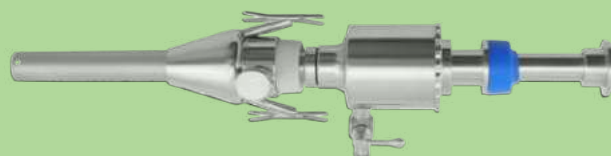


## ... more Features

- Made of high-quality stainless steel
- Comes with blunt obturator and integrated suture ties
- Robust design with LL stopcock
- Diameters of 5.5 mm or 11 mm available



## Hasson Trocar, Threaded Cannula



	Diameter		Color coding	Item no.
	Ø 5.5 mm	Ø 11 mm		
<b>Hasson trocar</b> , trap door, stainless steel, incl. obturator and cone	•		•	10-1067-05
<b>Hasson trocar</b> , trap door, stainless steel, incl. obturator and cone		•	•	10-1067

## Spare Hasson Cone w/o Suture Ties

For Use with 10-1067

	Type	Made of	Item no.
<b>Spare</b> Hasson cone, Ø 11 mm	w/o suture ties	carbon fiber	10-1067-501
<b>Spare</b> Hasson cone, Ø 11 mm	with suture ties	carbon fiber	10-1067-502
<b>Spare</b> Hasson cone, Ø 11 mm	for fascia sealing	stainless steel	10-1067-505
<b>Spare</b> Hasson cone, Ø 11 mm	with suture ties	stainless steel	10-1067-506



## S-Retractor for Hasson Technique

For Use with 10-1067



	Diameter		Item no.
	Ø 11.5 mm	Ø 15 mm	
<b>S-Retractor</b> for Hasson technique, pair	•		10-1098S
<b>S-Retractor</b> for Hasson technique, pair		•	10-1098

# Mini Lap Trocars

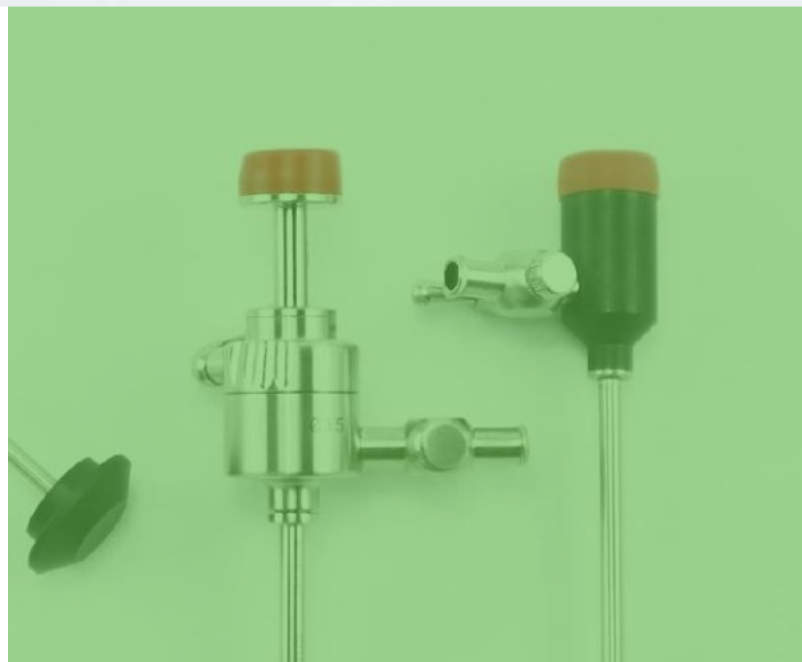
## Key Features

- Silicone valve trocar **weights less than 18 g**
- Maintenance-free **silicone valve**
- **Less damage** of scope and instrument tip due to less instrument friction
- **Excellent tactile feedback** when inserting into the abdominal cavity
- **Safe** CO<sup>2</sup> sealing



## ... more Features

- Trocars made of ultra light-weight reinforced carbon fiber and high-quality stainless steel
- Use with accompanying miniature laparoscopy obturators and instruments
- Ergonomic design with LL stopcock
- Easy cleaning due to demountability
- Easy valve exchange
- Color-coded sealing cap
- Diameters of 3 mm and working length of 70 mm
- + Other cannula lengths and diameters on request



## Miniature Silicone Valve Trocar, Plain Cannula

For Use with Miniature Instruments



	Color coding	Item no.
Miniature silicone valve trocar, $\varnothing$ 3 mm, 70 mm, matching obturator: 23-3021	●	23-3086

## Miniature Multifunctional Trocar, Plain Cannula

For Use with Miniature Instruments

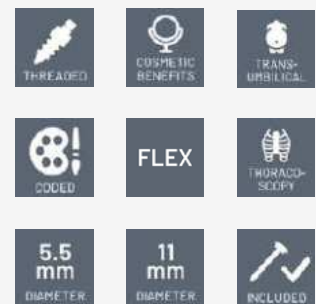


	Color coding	Item no.
Miniature multifunctional trocar, $\varnothing$ 3.5 mm, 70 mm, matching obturator: 23-3022	●	23-3084

# Single Port / Thoracoscopy Access

## Key Features

- **Decreasing trauma** and risk for herniation
- Enhanced **cosmetic benefits** and no visible scarring
- **Accelerated** recovery time
- **Obturator already included**
- **Color-coded** sealing cap



## ... more Features

- Use for trans-umbilical single port surgery with accompanying instruments
- Reduced postoperative pain
- Revolutionary technology in minimally-invasive laparoscopic surgery
- Made of maintenance-free silicon
- Single port trocar enables a 20 mm incision
- Diameters of 5.5 mm or 11 mm available
- Specially designed for use with Ackermann thoracoscopy / single port instruments



## Flexible Single Port / Thoracoscopy Trocars

Models incl. Obturator



	Diameter		Color coding	Item no.
	Ø 5.5 mm	Ø 11 mm		
<b>Flexible trocar</b> with obturator, threaded, 70 mm	•		•	13-1699A
<b>Flexible trocar</b> with obturator, threaded, 70 mm		•	•	13-1699B

## Single Port Silicone Trocar



	Item no.
<b>Single port trocar</b> for 20 mm umbilical incision, silicone, reusable	13-1699

# Custom Trocar Configuration

How to

- 1 Choose between a trocar diameter of 5.5 mm, 11 mm or 12.5 mm.
- 2 Choose an appropriate trocar cannula.
- 3 Add a trocar body.

## Note

Each component of the trocar body is also available separately as a spare part.



# Trocar Cannulas

Step 2

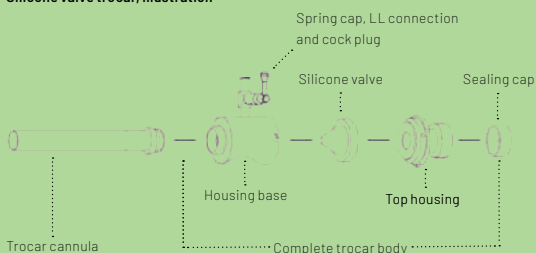
	Diameter			Cannula type		Cannula material		Item no.
	Ø 5.5 mm	Ø 11 mm	Ø 12.5 mm	Threaded	Plain	Carbon fiber	Stainless steel	
Trocar cannula only	•			•		•		10-1018
Trocar cannula only	•			•			•	10-1014
Trocar cannula only	•				•	•		10-1014NT
Trocar cannula only	•				•		•	10-1002-100
Trocar cannula only		•		•		•		10-1019
Trocar cannula only		•		•			•	10-1017
Trocar cannula only		•			•	•		10-1017NT
Trocar cannula only		•			•		•	10-1012-100
Trocar cannula only			•	•		•		10-1019-12,5
Trocar cannula only			•	•			•	10-1017-12,5
Trocar cannula only			•		•	•		10-1017NT-125
Trocar cannula only			•		•		•	10-1012-12,5-100



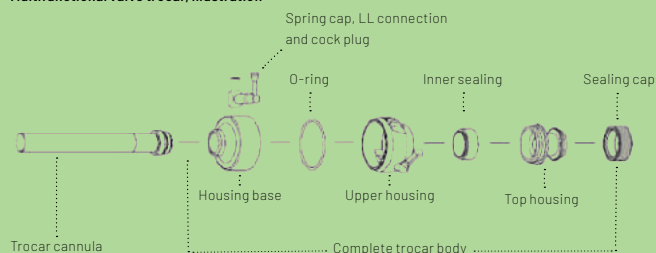
# Trocar Bodies

## Step 3

Silicone valve trocar, illustration



Multifunctional valve trocar, illustration



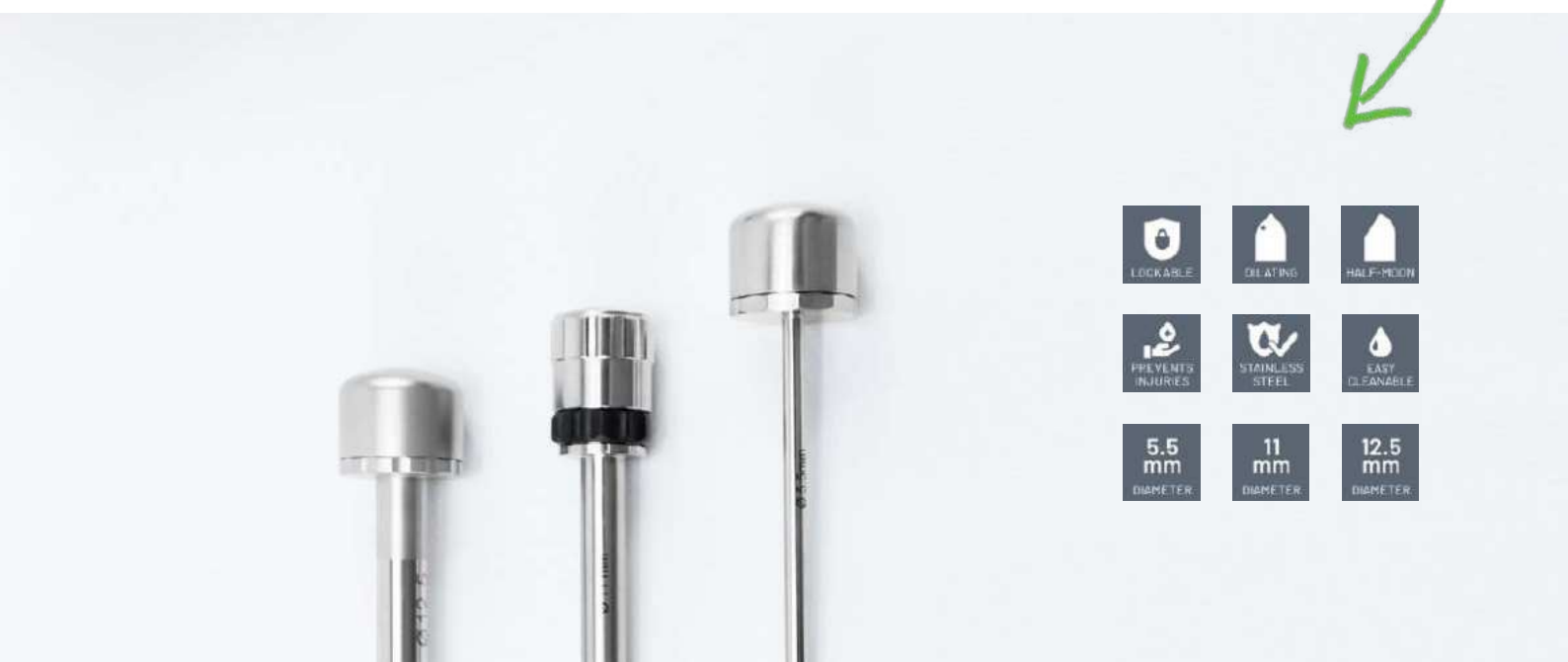
	Diameter	Body type		Color coding	Item no.
		Silicone valve	Multifunctional valve		
<b>Trocar body, silicone valve, complete</b>  includes Trocar body 10-1115-200 and Silicone valve 10-1008-100 and Top housing 10-1115-400 and Sealing cap 10-1029	Ø 5.5 mm	•		●	<b>10-1115BODY</b>
<b>Trocar body, multifunctional, complete</b>  includes Trocar body 10-1002-200 and O-ring 25x1,5 and Upper housing 10-1002-300 and Inner sealing 10-1031 and Top housing 10-1002-400 and Sealing cap 10-1029	Ø 5.5 mm		•	●	<b>10-1002BODY</b>
<b>Trocar body, silicone valve, complete</b>  includes Trocar body 10-1116-200 and Silicone valve 10-1013-100 and Top housing 10-1116-400 and Sealing cap 10-1030	Ø 11 mm	•		●	<b>10-1116BODY</b>
<b>Trocar body, multifunctional, complete</b>  includes Trocar body 10-1012-200 and O-ring 30x1,5 and Upper housing 10-1012-300 and Inner sealing 10-1032 and Top housing 10-1012-400 and Sealing cap 10-1030	Ø 11 mm		•	●	<b>10-1012BODY</b>
<b>Trocar body, silicone valve, complete</b>  includes Trocar body 10-1117-200 and Silicone valve 10-1013-100 and Top housing 10-1117-400 and Sealing cap 10-1030-12,5	Ø 12.5 mm	•		●	<b>10-1117BODY</b>
<b>Trocar body, multifunctional, complete</b>  includes Trocar body 10-1012-12,5-200 and O-ring 30x1,5 and Upper housing 10-1012-300 and Inner sealing 10-1032 and Top housing 10-1012-12,5-400 and Sealing cap 10-1030-12,5	Ø 12.5 mm		•	●	<b>10-1012-12,5BODY</b>



# Safety Obturators

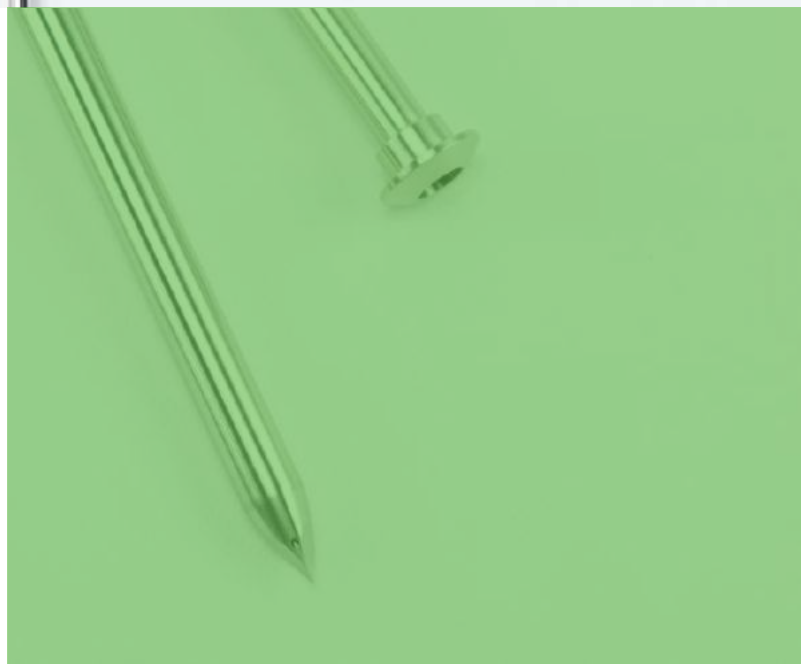
## Key Features

- **Increased protection** after penetration of the trocar in the abdominal cavity due to self-locking mechanism
- **Less abdominal injuries**
- **Rounded trocar blades** in the lateral area result in a **dilating effect**

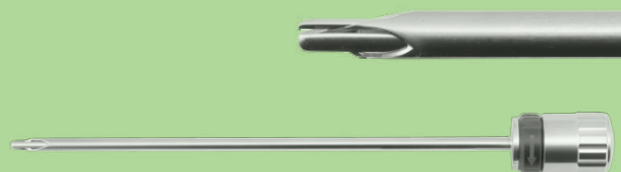


## ... more Features

- Obturators made of high-quality stainless steel
- If the cutting protection is activated, the trocar tip is not released until it is inserted into the abdominal cavity
- As soon as the trocar tip has passed the abdominal wall, it is again instantly secured
- Easy cleaning and reprocessing
- The triangular dilating tip obturator successfully penetrates the abdominal wall the internal gas escapes, indicating when to stop



## Lockable Safety Obturators



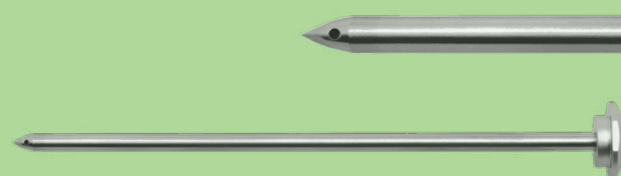
	For trocars with			Item no.
	Ø 5.5 mm	Ø 11 mm	Ø 12.5 mm	
Lockable safety obturator, active	•			10-1037
Lockable safety obturator, active		•		10-1047
Lockable safety obturator, active			•	10-1047-12,5

## Safety Obturators



	For trocars with			Item no.
	Ø 5.5 mm	Ø 11 mm	Ø 12.5 mm	
Safety obturator, half-moon, oblique tip	•			10-1036
Safety obturator, half-moon, oblique tip		•		10-1046
Safety obturator, half-moon, oblique tip			•	10-1051

## Triangular Dilating Tip Obturators



	For trocars with			Item no.
	Ø 5.5 mm	Ø 11 mm	Ø 12.5 mm	
Triangular dilating tip obturator with indication channel	•			10-1033
Triangular dilating tip obturator with indication channel		•		10-1048
Triangular dilating tip obturator with indication channel			•	10-1053

# Minimal Trauma Obturators

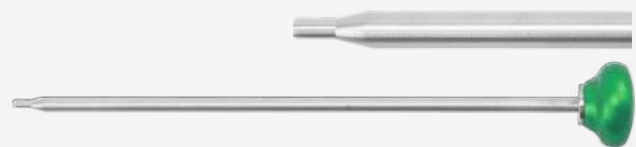
## Key Features

- **Minimal trauma** after penetration of the trocar in the abdominal cavity due to patented design of the obturator tip
- **Small incision** is required due to dilating effect
- Easy to clean **high-quality stainless steel**
- Available for trocars in diameters of 5.5 mm, 11 mm and 12.5 mm



PREVENTS INJURIES	STAINLESS STEEL	PIN TRAUMA
5.5 mm DIAMETER	11 mm DIAMETER	12.5 mm DIAMETER

## Minimal Trauma Obturators



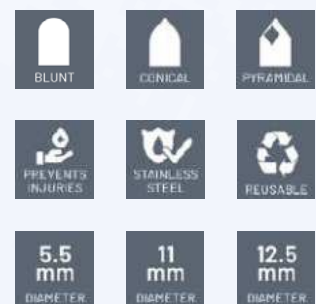
	For trocars with			Item no.
	Ø 5.5 mm	Ø 11 mm	Ø 12.5 mm	
Minimal trauma obturator	•			10-1068
Minimal trauma obturator		•		10-1069
Minimal trauma obturator			•	10-1069-12,5



# Standard Obturators

## Key Features

- Standard designs with **pyramidal / triangular, conical or blunt tip**
- To be used with all Ackermann **multifunctional and silicone valve trocars**
- Other diameters and cannula lengths e.g. **150 mm for bariatric procedures on request**

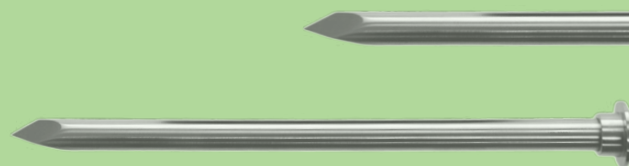


## ... more Features

- Obturators made of high-quality stainless steel
- For trocar diameters of 5.5 mm, 11 mm und 12.5 mm available
- Proven standard designs
- Maintenance free



## Pyramidal / Triangular Tip Obturators



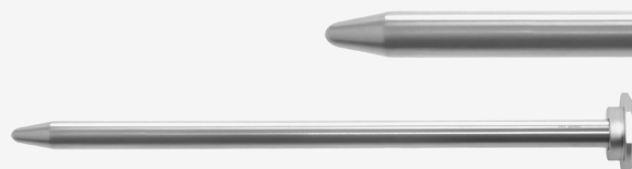
	For trocar with			Item no.
	Ø 5.5 mm	Ø 11 mm	Ø 12.5 mm	
Pyramidal / triangular tip obturator	•			10-1034
Pyramidal / triangular tip obturator		•		10-1044
Pyramidal / triangular tip obturator			•	10-1049

## Conical Tip Obturators



	For trocar with			Item no.
	Ø 5.5 mm	Ø 11 mm	Ø 12.5 mm	
Conical tip obturator	•			10-1035
Conical tip obturator		•		10-1045
Conical tip obturator			•	10-1050

## Blunt Tip Obturators



	For trocar with			Item no.
	Ø 5.5 mm	Ø 11 mm	Ø 12.5 mm	
Blunt tip obturator	•			10-1034BL
Blunt tip obturator		•		10-1044BL
Blunt tip obturator			•	10-1049BL

# Mini Lap Obturators

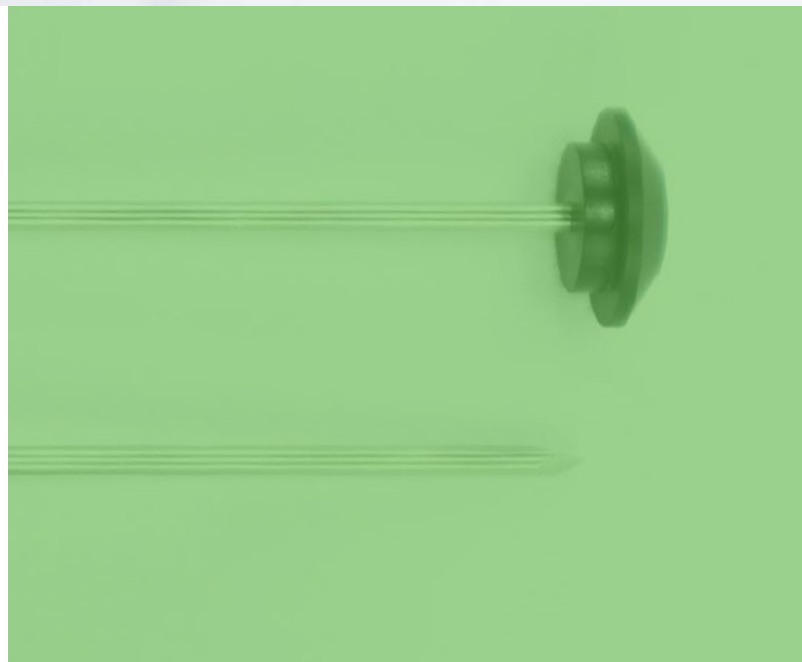
## Key Features

- Obturators made of high-quality stainless steel sheath and **light-weight carbon fiber top**
- Compatible with **Ackermann Miniature Laparoscopy trocars**



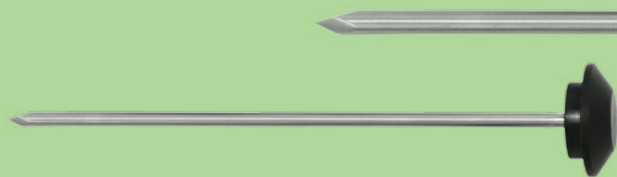
## ... more Features

- For trocar diameters of 3 mm
- Easy reprocessing
- Standard designs with proven pyramidal tip for easy access
- **+ Other designs and patterns on request**





## Triangular Obturators for Mini Laparoscopy

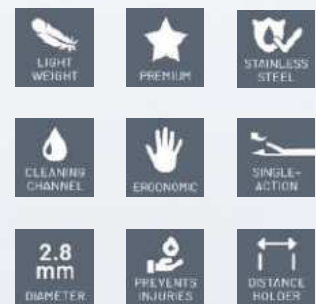


	Item no.
<b>Triangular tip</b> obturator for Miniature Laparoscopy, Ø 3 mm, for trocar 23-3086	23-3021
<b>Triangular tip</b> obturator for Miniature Laparoscopy, Ø 3 mm, for trocar 23-3084	23-3022

# Fascia Closing Instruments

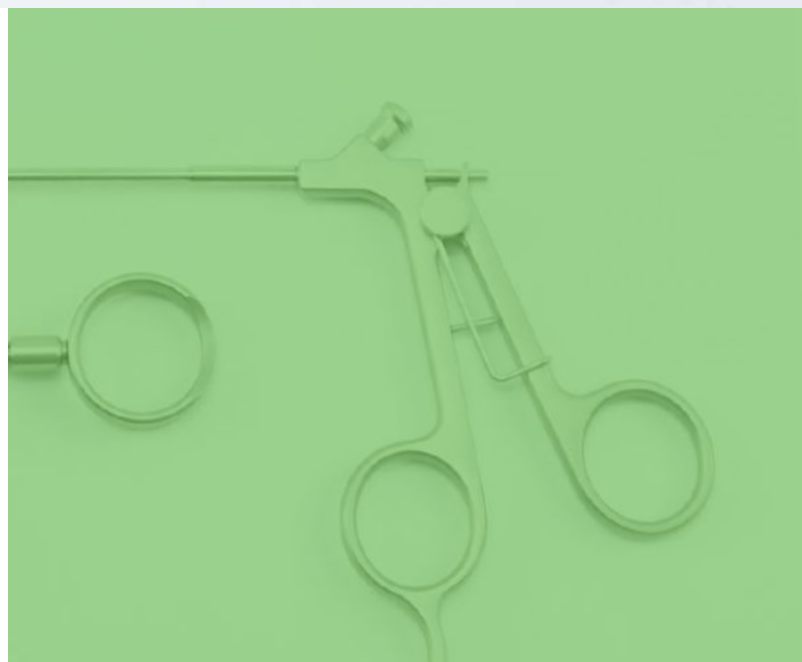
## Key Features

- Simple but **smart and light-weight** design for optimal comfort and ease of use
- **Needle cone shaped tip** to facilitate insertion
- Single action serrated inner jaws for **optimal suture grip**
- Large opening of movable tip to **facilitate gripping of the suture**
- Distance holder allows for a controlled insertion and helps to **prevent injuries to tissues and organs**

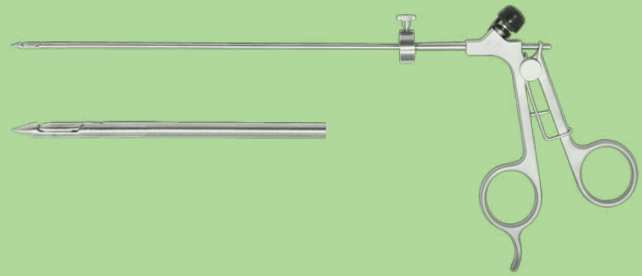


## ... more Features

- Medical grade high-quality stainless steel
- 100% made in Germany
- Working length of 180 mm
- Small diameter of 2.8 mm – for a minimally invasive approach
- Ergonomic spring handle suitable for left and right-handed physicians
- Flush port for easy reprocessing

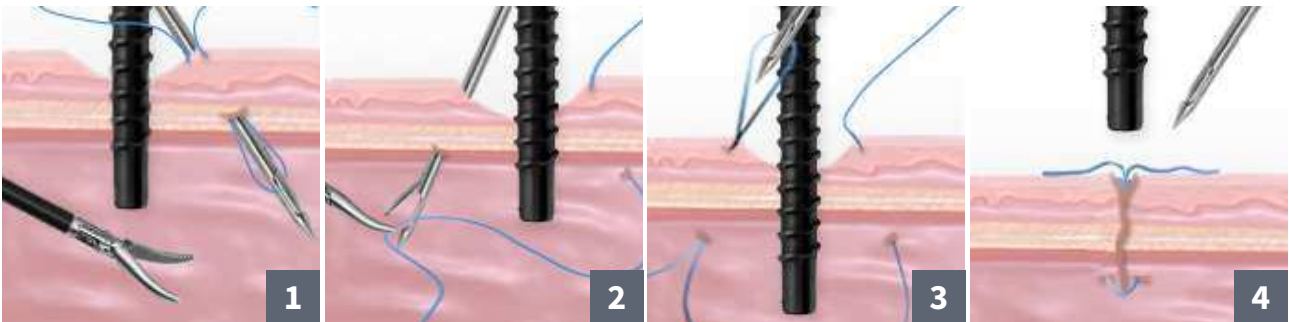


## Fascia Closing Suture Passer



	<b>Item no.</b>
<b>Fascia closing suture passer</b> with stop, Ø 3 mm , 180mm	<b>10-1114</b>

## How to use the Fascia Closing Suture Passer



## Fascia Closing Cannula

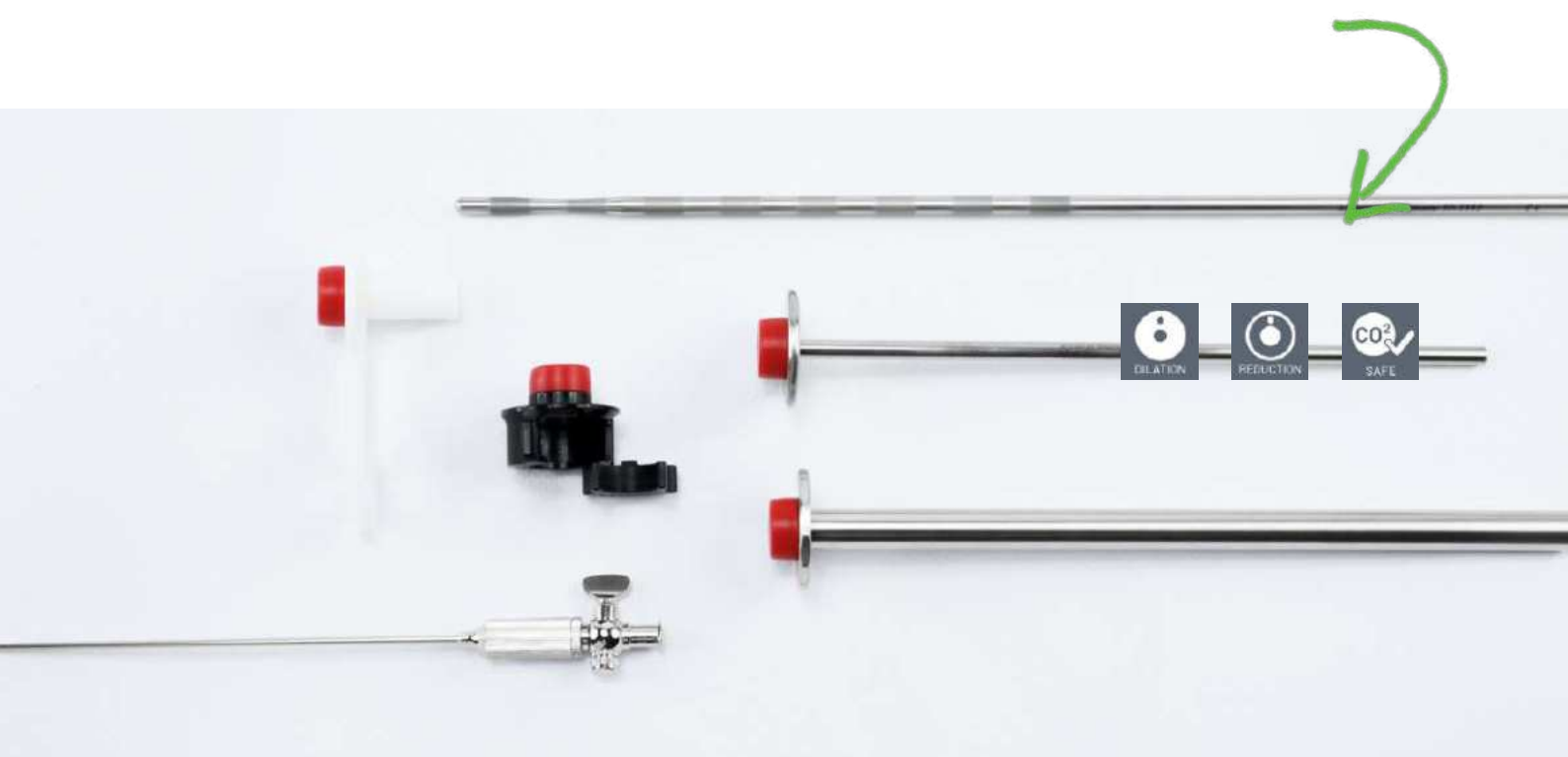


	<b>Item no.</b>
<b>Fascia closing cannula</b> , Ø 2.3 mm, 140mm	<b>10-1113</b>

# Reducers & Dilators

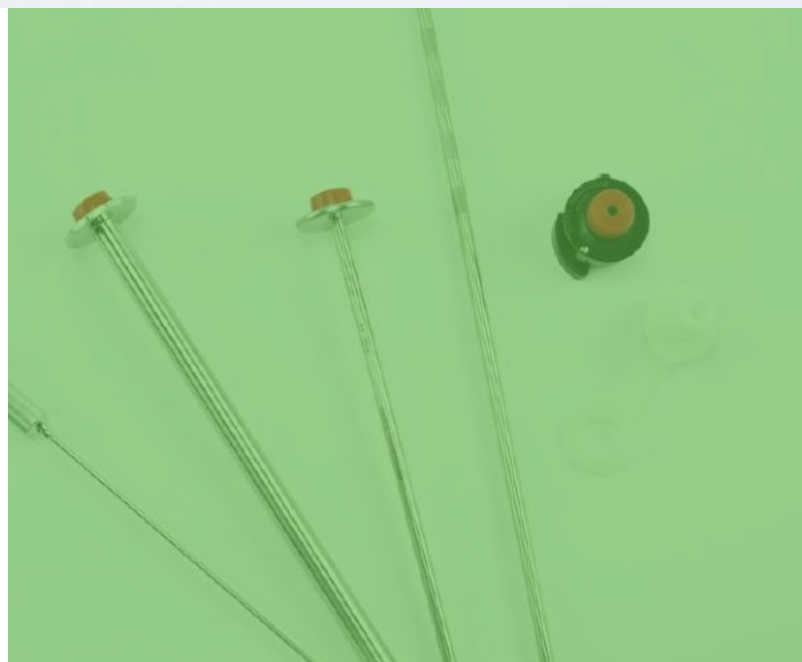
## Key Features

- Ackermann reducers enable **switching between instruments with a smaller diameter** without changing the trocar
- **Reduces** the loss of gas
- Dilators allow for **switching to a larger sized trocar** whenever indicated



## ... more Features

- Reducing accessories are to be used depending on the trocar diameter
- Plastic reducers with a silicone latch are particularly well suited for trocars with a manual trap door
- Our full range includes various reduction sleeves, slide-on reducers, flip-on reducers as well as dilation sets



## Flip-on Reducers



	Reduction diameter		Item no.
	Ø 11 mm to Ø 5.5 mm	Ø 12.5 mm to Ø 5.5 mm	
Flip-on reducer	•		10-1021-101
Flip-on reducer		•	10-1021-102

## Slide-on Reducer



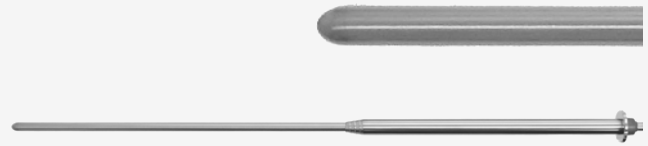
	Item no.
Slide-on reducer, Ø 11 mm / Ø 12.5 mm to Ø 5.5 mm	10-1021-201

## Reduction Sleeves



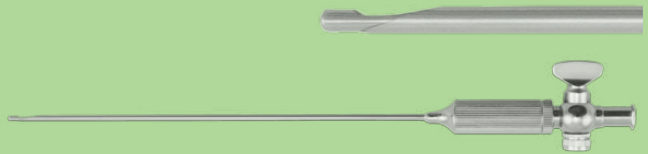
	Reduction diameter			Item no.
	Ø 5.5 mm to Ø 3 mm	Ø 10 mm to Ø 5.5 mm	Ø 11 mm to Ø 5.5 mm	
Reduction sleeve	•			10-1070-3
Reduction sleeve		•		10-1070
Reduction sleeve			•	10-1075

## Dilation Sets



	Dilation diameter		Item no.
	Ø 5.5 mm to Ø 11 mm	Ø 10 mm to Ø 15 mm	
Dilation set	•		10-1085
Dilation set		•	10-1090

## Verres Needles



	Length			Item no.
	100 mm	120 mm	150 mm	
Verres needle, Ø 2 mm	•			10-1100
Verres needle, Ø 2 mm		•		10-1105
Verres needle, Ø 2 mm			•	10-1111



# Obturator, Dilators and Reducers

Designs at a Glance



## Compatibility Matrix

For Trocars, Obturators, Dilators and Reducers

	Diameter				Color coding of trocar	Item no.
	Ø 3 mm	Ø 5.5 mm	Ø 11 mm	Ø 12.5 mm		
<b>Silicone valve trocar</b> , plain, miniature	•				●	23-3086
<b>Multifunctional valve trocar</b> , plain, miniature	•				●	23-3084
<b>Obturator</b> , triangular tip, for 23-3086	•				●	23-3021
<b>Obturator</b> , triangular tip, for 23-3084	•				●	23-3022
<b>Silicone valve trocar</b> , threaded		•			●	10-1115THC
<b>Silicone valve trocar</b> , plain		•			●	10-1115
<b>Multifunctional valve trocar</b> , threaded		•			●	10-1002THC
<b>Multifunctional valve trocar</b> , plain		•			●	10-1002
<b>Obturator</b> , dilating tip		•			●	10-1033
<b>Obturator</b> , pyramidal tip		•			●	10-1034
<b>Obturator</b> , blunt tip		•			●	10-1034BL
<b>Obturator</b> , conical tip		•			●	10-1035



Description	Diameter				Color coding of trocar	Item no.
	Ø 3 mm	Ø 5.5 mm	Ø 11 mm	Ø 12.5 mm		
<b>Obturator</b> , safety shield tip		•			●	10-1036
<b>Obturator</b> , safety shield tip, lockable		•			●	10-1037
<b>Obturator</b> , minimal trauma tip		•			●	10-1068
<b>Reduction</b> sleeve	•	•			●	10-1070-3
<b>Dilation</b> set		•	•		●	10-1085
<b>Silicone valve trocar</b> , threaded			•		●	10-1116THC
<b>Silicone valve trocar</b> , plain			•		●	10-1116
<b>Multifunctional valve trocar</b> , threaded			•		●	10-1012THC
<b>Multifunctional valve trocar</b> , plain			•		●	10-1012
<b>Obturator</b> , dilating tip			•		●	10-1048
<b>Obturator</b> , pyramidal tip			•		●	10-1044
<b>Obturator</b> , blunt tip			•		●	10-1044BL
<b>Obturator</b> , conical tip			•		●	10-1045
<b>Obturator</b> , safety shield tip			•		●	10-1046
<b>Obturator</b> , safety shield tip, lockable			•		●	10-1047
<b>Obturator</b> , minimal trauma tip			•		●	10-1069
<b>Reduction</b> sleeve			•		●	10-1075
<b>Dilation</b> set			•	•	●	10-1090
<b>Flip-on</b> reducer			•		●	10-1021-101
<b>Slide-on</b> reducer		•	•		●	10-1021-201
<b>Silicone valve trocar</b> , threaded				•	●	10-1117THC
<b>Silicone valve trocar</b> , plain				•	●	10-1117
<b>Multifunctional valve trocar</b> , threaded				•	●	10-1012-12,5THC
<b>Multifunctional valve trocar</b> , plain				•	●	10-1012-12,5
<b>Obturator</b> , dilating tip				•	●	10-1053
<b>Obturator</b> , pyramidal tip				•	●	10-1049
<b>Obturator</b> , blunt tip				•	●	10-1049BL
<b>Obturator</b> , conical tip				•	●	10-1050
<b>Obturator</b> , safety shield tip				•	●	10-1051
<b>Obturator</b> , safety shield tip, lockable				•	●	10-1047-12,5
<b>Obturator</b> , minimal trauma tip				•	●	10-1069-12,5
<b>Dilation</b> set				•	●	10-1090
<b>Flip-on</b> reducer				•	●	10-1021-102
<b>Slide-on</b> reducer				•	●	10-1021-201

# Laparoscopes & Accessories

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Laparoscopes with Working Channel / **p. 56 - 57**

Fiber Light Cables, Adapters & Light Cable Testers / **p. 58 - 60**





# Laparoscopes

## Key Features

- Available in **4k UHD, FullHD and standard resolution**
- **Sapphire glass lense** at proximal and distal end
- Nitrogen filled optical system to **avoid fogging** from the inside
- Three-tube construction for **more stability**
- Sealing by **laser welding** with **excellent** optical transmission
- **Autoclavable**



## ... more Features

- Made of high-quality stainless steel
- Sophisticated, anti-reflective optical system
- Powerful optical fibers
- Highly refractive lenses for optimum colour rendering even at high magnification
- Light cable adapters to Ackermann, Storz<sup>1</sup>, Olympus<sup>1</sup>, Wolf<sup>1</sup>, ACMI<sup>1</sup>
- High-quality glass cone for optimizing light input
- Standard C-Mount coupling
- Extremely precise centering of the optical and mechanical components for a brilliant and high-contrast image right up to the edge area the inside



## 4k UHD Laparoscopes



	Diameter		Viewing angle			Length				Item no.
	Ø 5 mm	Ø 10 mm	0°	30°	45°	300 mm	330 mm	425 mm	450 mm	
4k UHD Laparoscope	•		•			•				11-1120UHD
4k UHD Laparoscope	•			•		•				11-1125UHD
4k UHD Laparoscope	•				•	•				11-1126UHD
4k UHD Bariatric Laparoscope	•		•					•		11-1120-45UHD
4k UHD Bariatric Laparoscope	•			•				•		11-1125-45UHD
4k UHD Bariatric Laparoscope	•				•			•		11-1126-45UHD
4k UHD Laparoscope		•	•				•			11-1130UHD
4k UHD Laparoscope		•		•			•			11-1135UHD
4k UHD Laparoscope		•			•		•			11-1136UHD
4k UHD Bariatric Laparoscope		•	•						•	11-1130-45UHD

## FullHD Laparoscopes



	Diameter		Viewing angle			Length				Item no.
	Ø 5 mm	Ø 10 mm	0°	30°	45°	300 mm	330 mm	425 mm	450 mm	
FullHD Laparoscope	•		•			•				11-1120HD
FullHD Laparoscope	•			•		•				11-1125HD
FullHD Laparoscope	•				•	•				11-1126HD
FullHD Bariatric Laparoscope	•		•					•		11-1120-45HD
FullHD Bariatric Laparoscope	•			•				•		11-1125-45HD
FullHD Bariatric Laparoscope	•				•			•		11-1126-45HD
FullHD Laparoscope		•	•				•			11-1130HD
FullHD Laparoscope		•		•			•			11-1135HD
FullHD Laparoscope		•			•		•			11-1136HD
FullHD Bariatric Laparoscope		•	•						•	11-1130-45HD

# Standard Laparoscopes



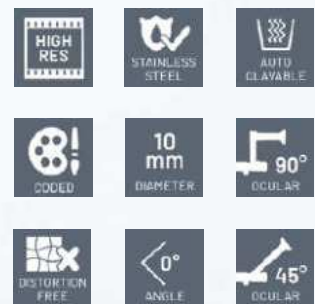
	Diameter		Viewing angle			Length				Item no.
	Ø 5 mm	Ø 10 mm	0°	30°	45°	300 mm	330 mm	425 mm	450 mm	
Standard Laparoscope	•		•			•				11-1120
Standard Laparoscope	•			•		•				11-1125
Standard Laparoscope	•				•	•				11-1126
Standard Laparoscope		•	•				•			11-1130
Standard Laparoscope		•		•			•			11-1135
Standard Laparoscope		•		•					•	11-1135-45
Standard Laparoscope		•			•		•			11-1136



# Laparoscopes with Working Channel

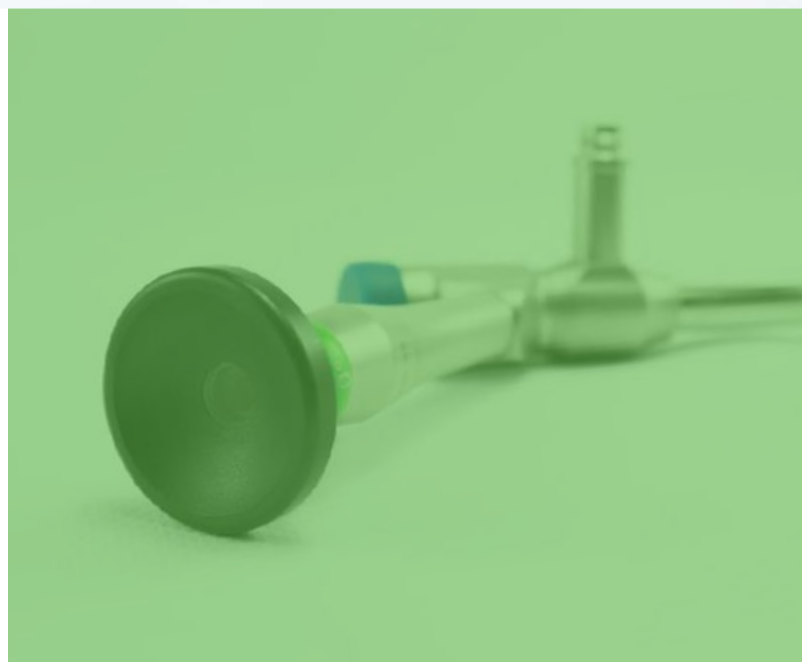
## Key Features

- **Highest resolution** and depth of view
- Larger magnification
- Wide angle
- Ocular angled **90° or 45°**



## ... more Features

- Available in 10 mm with 0°, featuring an 6 mm instrument channel
- Polished lenses made of sapphire glass
- Autoclavable at 134°
- Brilliant and bright picture
- Distortion-free picture
- C-Mount coupling
- Includes various adapters (Ackermann, Storz<sup>1</sup>, Olympus<sup>1</sup>, Wolf<sup>1</sup>, ACMI<sup>1</sup>)





## OP Laparoscopes

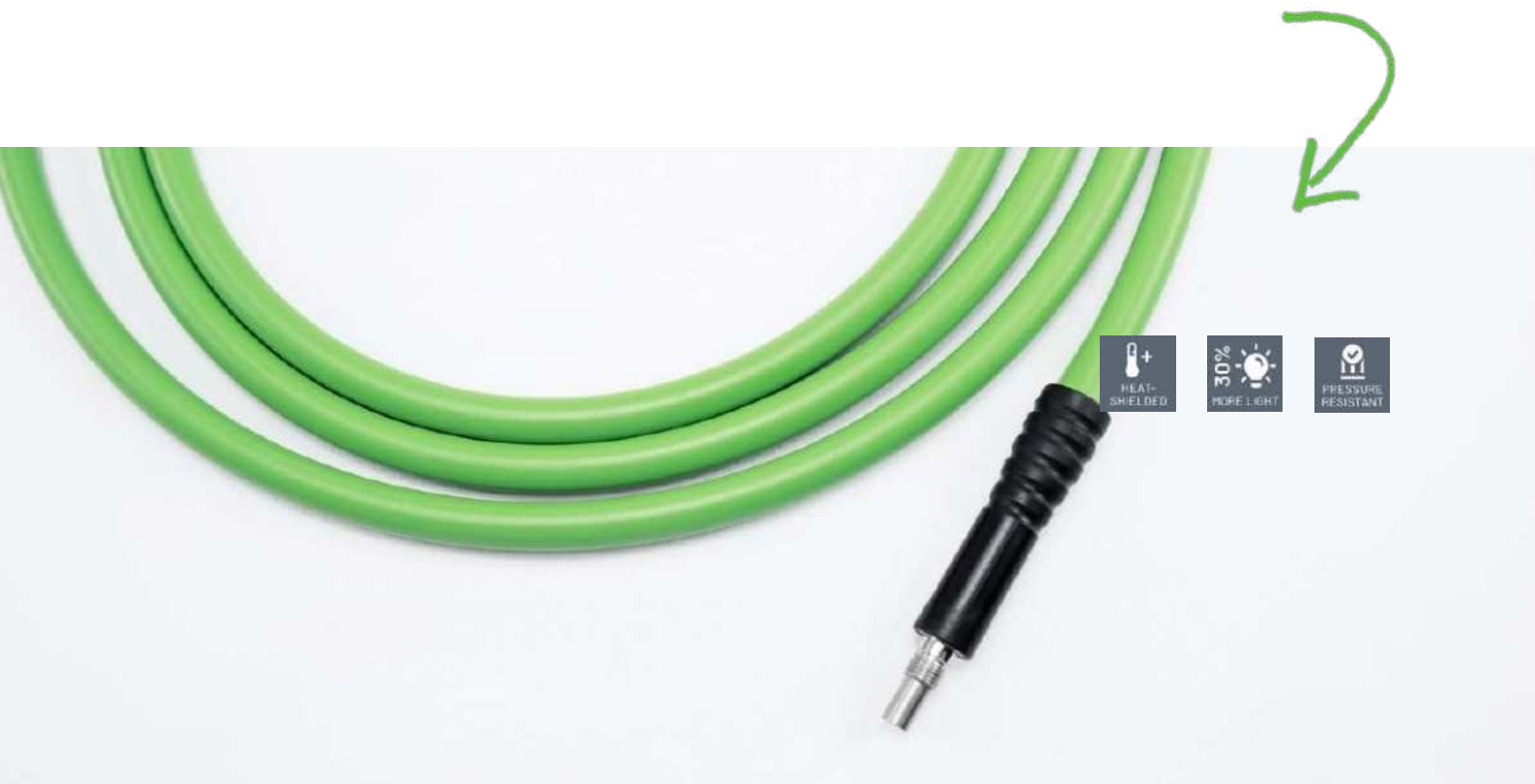


	Ocular		Item no.
	45° angled	90° angled	
Laparoscope with working channel, Ø 10 mm, 0°, 265 working length	•		11-1140
Laparoscope with working channel, Ø 10 mm, 0°, 265 working length		•	11-1145

# Fiber Light Cables & Adapters

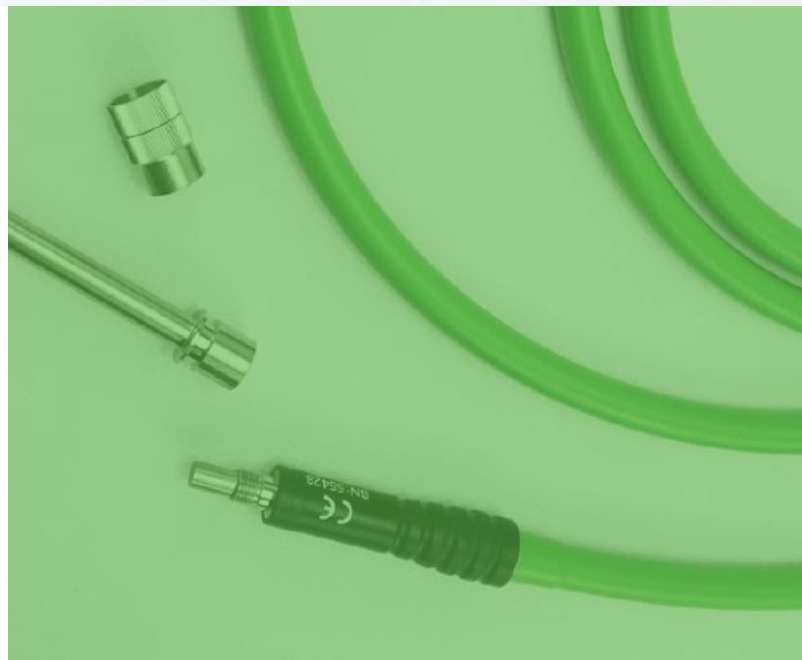
## Key Features

- No gaps between the fibers ensure **30% more light** in comparison to conventionally bundled fiber light cables
- Extremely **sturdy material but highly flexible** at the same time



## ... more Features

- Transverse pressure resistant
- Excellent bending property
- Other colors and patterns on request



## High-Performance Fiber Light Cables



	Length			Item no.
	1.8 m	2.4 m	3 m	
High-performance fiber light cable, Ø 4.8 mm	•			11-1168
High-performance fiber light cable, Ø 4.8 mm		•		11-1167
High-performance fiber light cable, Ø 4.8 mm			•	11-1161

## Standard Fiber Light Cables



	Length			Item no.
	1.8 m	2.3 m	3 m	
Standard fiber light cable, Ø 3.5 mm	•			11-1150
Standard fiber light cable, Ø 3.5 mm		•		11-1151
Standard fiber light cable, Ø 3.5 mm			•	11-1152




## Anti-Fogging Lube

For Use with Ackermann Scopes







	Item no.
Anti-fogging lube, UOM 30 pcs.	11-1121

## Scope-side Adapters

	Type			Item no.
	Ackermann / Storz <sup>1</sup>	Wolf <sup>1</sup>	ACMI <sup>1</sup> / Circon <sup>1</sup> /Stryker <sup>1</sup>	
Scope-side adapter	 •			11-1146-100
Scope-side adapter		 •		11-1146-200
Scope-side adapter			 •	11-1146-300

## Lightsource-side Adapters

	Type				Item no.
	Ackermann / Storz <sup>1</sup>	Wolf <sup>1</sup>	ACMI <sup>1</sup> / Circon <sup>1</sup> /Stryker <sup>1</sup>	Olympus <sup>1</sup>	
Lightsource-side adapter	 •				11-1147-100
Lightsource-side adapter		 •			11-1147-200
Lightsource-side adapter			 •		11-1147-300
Lightsource-side adapter				 •	11-1147-400

## Light Cable Testers



	Type			Item no.
	Ackermann / Storz <sup>1</sup>	Wolf <sup>1</sup>	Olympus <sup>1</sup>	
Light cable tester	 •			11-1600CB
Light cable tester		 •		11-1600CBWOL
Light cable tester			 •	11-1600CBOLYWA



# Monopolar & Bipolar Electrodes

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Suction/Irrigation Electrodes & Handles / **p. 71 - 73**

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# Ceramic Tip Monopolar Electrodes

## Key Features

- Due to lasting and precise coagulation, **less collateral tissue damage**
- Easier cleanable surface
- Cost-effective due to **long-term stable surface**
- **Low-tempered coagulation** preserves the electrodes' insulation



## ... more Features

- Easy assembly and disassembly
- Fully insulated
- Wear-resistant ceramic tip
- More resistant to detergents and disinfectants in comparison to standard electrodes
- Available in Ø 5 mm with 330 mm or 450 mm working length





## L-Hook Electrodes, Ceramic Tip



	Length		Item no.
	330 mm	450 mm	
L-Hook electrode with ceramic tip, monopolar, Ø 5 mm	•		11-1175C
L-Hook electrode with ceramic tip, monopolar, Ø 5 mm		•	11-1175C-45

## J-Hook Electrodes, Ceramic Tip



	Length		Item no.
	330 mm	450 mm	
J-Hook electrode with ceramic tip, monopolar, Ø 5 mm	•		11-1185C
J-Hook electrode with ceramic tip, monopolar, Ø 5 mm		•	11-1185C-45

## Spatula Electrodes, Ceramic Tip



	Length		Item no.
	330 mm	450 mm	
Spatula electrode with ceramic tip, monopolar, Ø 5 mm	•		11-1170C
Spatula electrode with ceramic tip, monopolar, Ø 5 mm		•	11-1170C-45

# Standard Monopolar Electrodes

## Key Features

- **Various** tip pattern options
- Available in Ø 5 mm with **330 mm or 450 mm working length**
- **Extended and durable** insulation



## Spatula Electrodes



	Length		Item no.
	330 mm	450 mm	
Spatula electrode, monopolar, Ø 5 mm	•		11-1170
Spatula electrode, monopolar, Ø 5 mm		•	11-1170-45

## L-Hook Electrodes



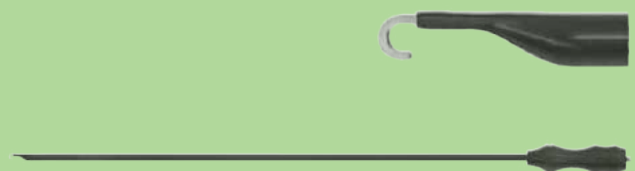
	Length		Item no.
	330 mm	450 mm	
L-Hook electrode, monopolar, Ø 5 mm	•		11-1175
L-Hook electrode, monopolar, Ø 5 mm		•	11-1175-45

## Knife Electrodes



	Length		Item no.
	330 mm	450 mm	
Knife electrode, monopolar, Ø 5 mm	•		11-1180
Knife electrode, monopolar, Ø 5 mm		•	11-1180-45

## J-Hook Electrodes



	Length		Item no.
	330 mm	450 mm	
J-Hook electrode, monopolar, Ø 5 mm	•		11-1185
J-Hook electrode, monopolar, Ø 5 mm		•	11-1185-45

## Sickle Electrodes



	Length		Item no.
	330 mm	450 mm	
<b>Sickle</b> electrode, monopolar, Ø 5 mm	•		<b>11-1188</b>
<b>Sickle</b> electrode, monopolar, Ø 5 mm		•	<b>11-1188-45</b>

## Needle Electrodes



	Length		Item no.
	330 mm	450 mm	
<b>Needle</b> electrode, monopolar, Ø 5 mm	•		<b>11-1200</b>
<b>Needle</b> electrode, monopolar, Ø 5 mm		•	<b>11-1200-45</b>

## Cone Electrodes



	Length		Item no.
	330 mm	450 mm	
<b>Cone</b> electrode, monopolar, Ø 5 mm	•		<b>11-1205</b>
<b>Cone</b> electrode, monopolar, Ø 5 mm		•	<b>11-1205-45</b>

## Button Electrodes

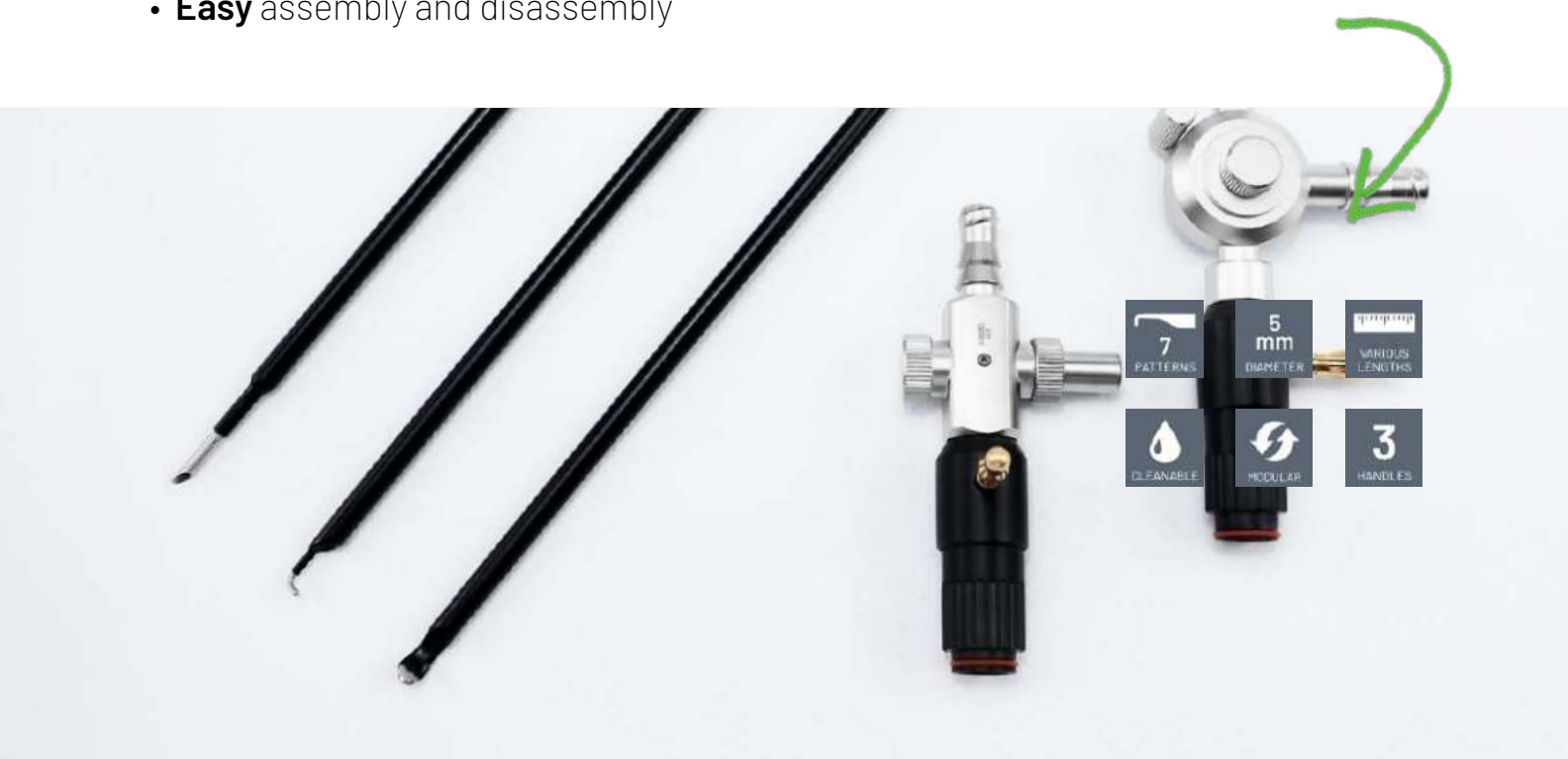


	Length		Item no.
	330 mm	450 mm	
Button electrode, monopolar, Ø 5 mm	•		11-1210
Button electrode, monopolar, Ø 5 mm		•	11-1210-45

# Suction/Irrigation Monopolar Electrodes

## Key Features

- Various electrode patterns with **suction/irrigation channel**
- **3 different valve handle options** enable higher flexibility during each surgical procedure
- Available in Ø 5 mm with **330 mm or 450 mm working length**
- Fully **insulated**
- **Easy** assembly and disassembly



## Spatula Electrodes, Adaptable

For Use with 11-1171 / 11-1173 / 11-1174



	Length		Item no.
	330 mm	450 mm	
Spatula electrode with suction-irrigation channel, adaptable, monopolar, Ø 5 mm	•		11-1178
Spatula electrode with suction-irrigation channel, adaptable, monopolar, Ø 5 mm		•	11-1178-45

## L-Hook Electrodes, Adaptable

For Use with 11-1171 / 11-1173 / 11-1174



	Length		Item no.
	330 mm	450 mm	
<b>L-Hook</b> Electrode with suction-irrigation channel, adaptable, monopolar, Ø 5 mm	•		<b>11-1179</b>
<b>L-Hook</b> Electrode with suction-irrigation channel, adaptable, monopolar, Ø 5 mm		•	<b>11-1179-45</b>

## Knife Electrodes, Adaptable

For Use with 11-1171 / 11-1173 / 11-1174



	Length		Item no.
	330 mm	450 mm	
<b>Knife</b> electrode with suction-irrigation channel, adaptable, monopolar, Ø 5 mm	•		<b>11-1181</b>
<b>Knife</b> electrode with suction-irrigation channel, adaptable, monopolar, Ø 5 mm		•	<b>11-1181-45</b>

## J-Hook Electrodes, Adaptable

For Use with 11-1171 / 11-1173 / 11-1174



	Length		Item no.
	330 mm	450 mm	
<b>J-Hook</b> electrode with suction-irrigation channel, adaptable, monopolar, Ø 5 mm	•		<b>11-1182</b>
<b>J-Hook</b> electrode with suction-irrigation channel, adaptable, monopolar, Ø 5 mm		•	<b>11-1182-45</b>

## Cone Electrodes, Adaptable

For Use with 11-1171 / 11-1173 / 11-1174



	Length		Item no.
	360 mm	450 mm	
<b>Cone</b> electrode with suction-irrigation channel, adaptable, monopolar, Ø 5 mm	•		<b>11-1186</b>
<b>Cone</b> electrode with suction-irrigation channel, adaptable, monopolar, Ø 5 mm		•	<b>11-1186-45</b>

## Needle Electrodes, Adaptable

For Use with 11-1171 / 11-1173 / 11-1174



	Length		Item no.
	360 mm	450 mm	
<b>Needle</b> electrode with suction-irrigation channel, adaptable, monopolar, Ø 5 mm	•		<b>11-1187</b>
<b>Needle</b> electrode with suction-irrigation channel, adaptable, monopolar, Ø 5 mm		•	<b>11-1187-45</b>

## Button Electrodes, Adaptable

For Use with 11-1171 / 11-1173 / 11-1174



	Length		Item no.
	360 mm	450 mm	
<b>Button</b> electrode with suction-irrigation channel, adaptable, monopolar, Ø 5 mm	•		<b>11-1184</b>
<b>Button</b> electrode with suction-irrigation channel, adaptable, monopolar, Ø 5 mm		•	<b>11-1184-45</b>



## Trumpet Valve Handle for Adaptable Electrodes



	<b>Item no.</b>
Trumpet valve handle for adaptable suction-irrigation electrodes	11-1171

## 2-Way Handle for Adaptable Electrodes



	<b>Item no.</b>
Two-way handle for adaptable suction-irrigation electrodes	11-1173

## Pistol Handle for Adaptable Electrodes

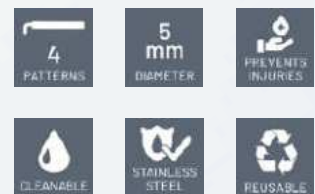


	<b>Item no.</b>
Pistol handle for adaptable suction-irrigation electrodes	11-1174

# Standard Bipolar Electrodes

## Key Features

- Easy to clean surface
- **Optimized pole arrangement** allows for safe minimally-invasive coagulation and dissection of tissue
- The insulating coating between the electrodes ensures a **constant distance** and thus a **balanced coagulation result**



## Spatula Electrode, Bipolar



**Spatula** electrode, bipolar, Ø 5 mm, 340 mm

Item no.

11-1190

## L-Hook Electrode, Bipolar



	<b>Item no.</b>
L-Hook electrode, bipolar, Ø 5 mm, 340 mm	11-1191

## Ball Electrode, Bipolar



	<b>Item no.</b>
Ball electrode, bipolar, Ø 5 mm, 340 mm	11-1192

## J-Hook Electrode, Bipolar



	<b>Item no.</b>
J-Hook electrode, bipolar, Ø 5 mm, 340 mm	11-1193

# Suction/Irrigation Accessories

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# High-Flow Suction/Irrigation

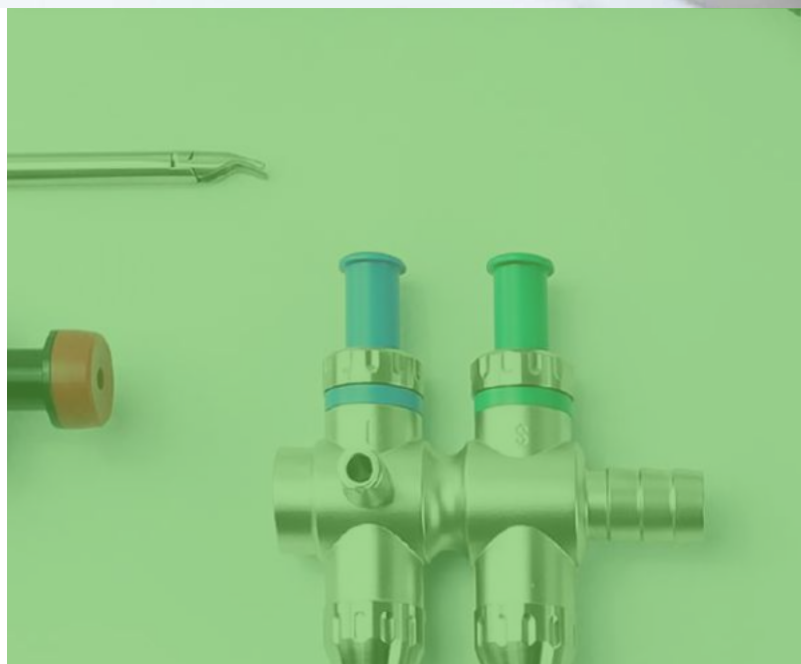
## Key Features

- **High-flow**, ideal for large cavity procedures
- **Color-coding**: blue - irrigation / green - suction
- **One-handed control** by trumpet valve system



## ... more Features

- Easy assembly and disassembly
- Maximizing of flow rate due to drillings on the distal end of tube, also preventing vacuum
- Available with Ø 5 mm and Ø 10 mm suction tubing individually or as complete set
- Large tube connection
- Handle with tube-luer-lock



## High-flow Tubing Set



			Item no.
<b>Trumpet valve handle incl. Ø 5 mm and Ø 10 mm high-flow tubes</b>			<b>11-1235</b>
includes	High-flow tube with drillings, Ø 5 mm	11-1235-100	
and	High-flow tube with drillings, Ø 10 mm	11-1235-101	
and	Trumpet valve handle	11-1235-102	

## Trumpet Valve Handle

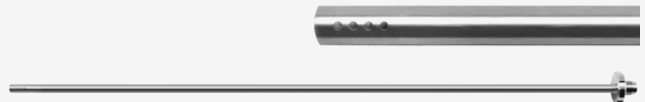
For Use with 11-1235-101 / 11-1235-102



	Item no.
<b>Trumpet valve</b> handle	<b>11-1235-102</b>

## High-flow Tubes

For Use with 11-1235-102



	Diameter		Item no.
	Ø 5 mm	Ø 10 mm	
<b>High-flow</b> tube with drillings	•		<b>11-1235-100</b>
<b>High-flow</b> tube with drillings		•	<b>11-1235-101</b>

# Pistol Handle Suction/Irrigation

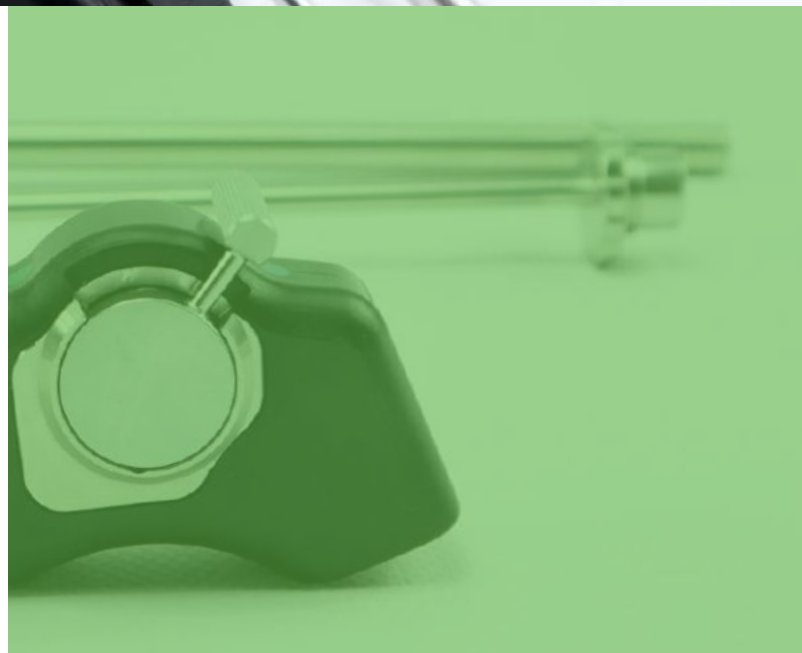
## Key Features

- **2-in-1 ergonomic handle:** suction-irrigation-function or coagulation
- Ease of use due to **1-finger action**
- **Dynamic flow and pressure** control



## ... more Features

- Enlarged suction channel
- Comfortable operation due to swivel movement of sliding valve
- Fully detachable





## Pistol Handle

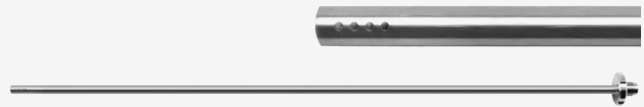
For Use with 11-1277 / 11-1278



	Item no.
Pistol handle	11-1276

## Standard Tube

For Use with 11-1276



	Diameter			Item no.
	Ø 3 mm	Ø 5 mm	Ø 10 mm	
Standard tube with drillings	•			11-1278-3
Standard tube with drillings		•		11-1278
Standard tube with drillings			•	11-1277

## Electrode Adapter

For Use with 11-1276



	Item no.
Electrode adapter to use 11-1276 with adaptable electrodes	11-1279

# Interchangeable Suction/Irrigation

## Key Features

- Available as **pre-configured set**
- Flexibly expandable due to **wide range** of different tubes patterns
- **Easy** assembly and disassembly
- Available in **Ø 3 mm, Ø 5 mm and Ø 10 mm** suction tubing
- **Bariatric** lengths on request

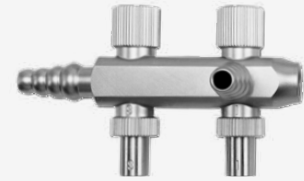


## Interchangeable Tubing Set



			Item no.
<b>Modular suction-irrigation handle incl. Ø 5 mm and Ø 10 mm tubes</b>			<b>11-1236COM</b>
includes	Standard tube, Ø 5 mm, 330 mm	11-1237	
and	Standard tube, Ø 10 mm, 330 mm	11-1238	
and	Modular handle for 3/5/10 mm suction-irrigation tubes	11-1236	

## Modular Handle for Suction-Irrigation-Tubes



Item no.

**Modular** handle for 3 mm / 5 mm / 10 mm suction-irrigation tubes

**11-1236**

## Standard Tube

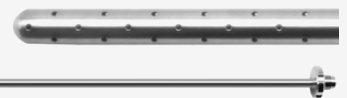
For Use with 11-1236



	Diameter			Drillings				Item no.
	Ø 3 mm	Ø 5 mm	Ø 10 mm	4	8	16	32	
<b>Standard</b> tube, 330 mm	•				•			<b>11-1237-700</b>
<b>Standard</b> tube, 330 mm		•		•				<b>11-1237-800</b>
<b>Standard</b> tube, 330 mm		•				•		<b>11-1237</b>
<b>Standard</b> tube, 330 mm			•				•	<b>11-1238</b>

## Roundhole Bee Hive Tube

For Use with 11-1236



	Type	Length		Item no.
		330 mm	450 mm	
<b>Roundhole bee hive</b> tube with offset holes, Ø 5 mm, 48 drillings	non-rounded	•		<b>11-1237-100</b>
<b>Roundhole bee hive</b> tube with offset holes, Ø 5 mm, 48 drillings	non-rounded		•	<b>11-1237-100-45</b>
<b>Roundhole bee hive</b> tube with offset holes, Ø 5 mm, 48 drillings	rounded	•		<b>11-1237-200</b>
<b>Roundhole bee hive</b> tube with offset holes, Ø 5 mm, 48 drillings	strongly rounded	•		<b>11-1237-300</b>

## Blunt Tube

For Use with 11-1236



**Blunt** tube with tapered tip, Ø 5 mm, 12 drillings, 330 mm

Item no.

11-1237-600

## Suction Needle

For Use with 11-1236



**Suction needle**, Ø 5 mm

Item no.

11-1237-400

## Aqua Dissecting Suction Tube

For Use with 11-1236



**Aqua dissecting** suction tube, Ø 5 mm, 330 mm

Item no.

11-1237-500



# Reusable Instrument Lines

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Inserts for XPress Lock™ System CS™ / **p. 100 - 138**

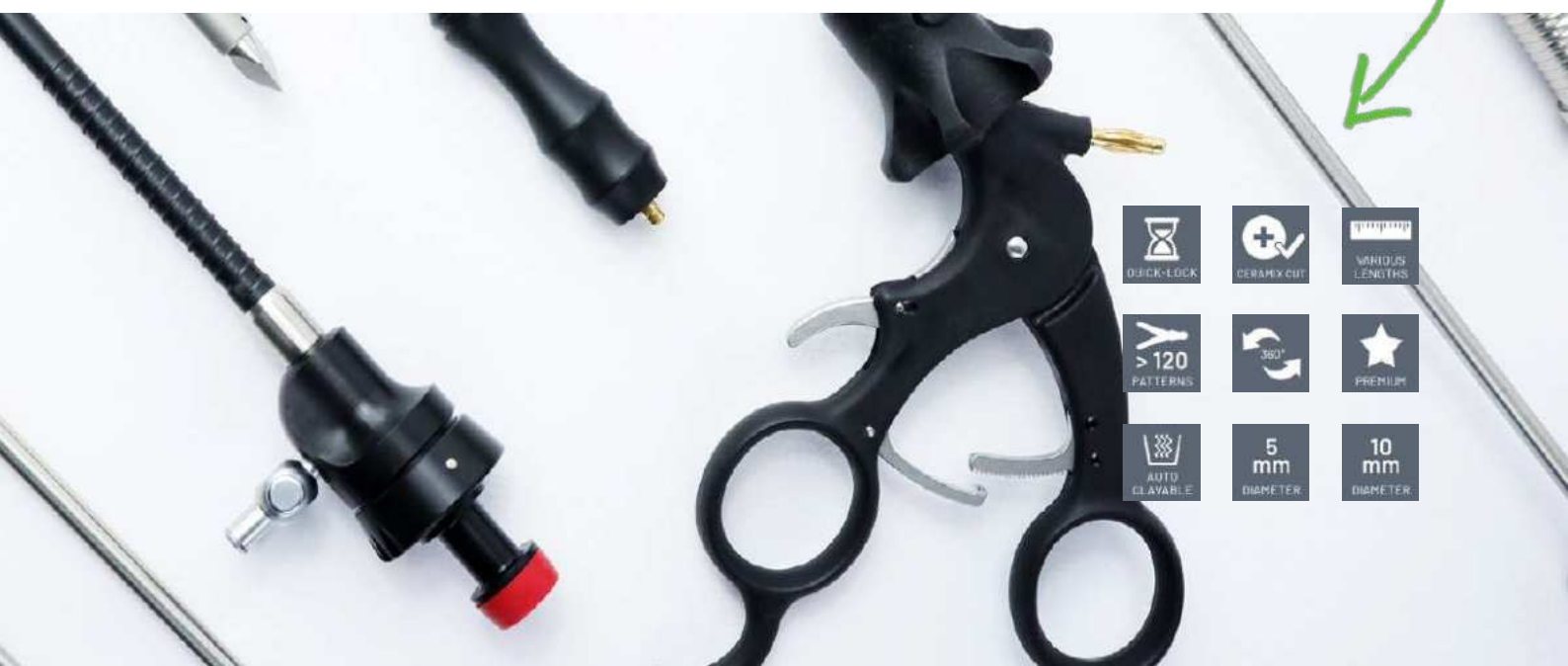




# XPress Lock™ Line

## Key Features

- Its innovative **quick-lock mechanism** allows for assembly and disassembly within seconds
- **Fully intuitive** and reliable
- **More than 120 different instrument patterns**, from multiple graspers, dissectors, specialty instruments and **Ceramix Cut™**, a high performance Metzenbaum scissor insert featuring ceramic coated blades



## ... more Features

- Autoclavable
- Lengths of 330 and 450 mm
- No hidden spaces to accommodate blood and debris
- 45° HF-port on the handle
- Ratchet design for on-off action available
- 360° rotatable with audible and tactile feedback
- Unique range of premium instrumentation





## XPress Lock™ Handle with Universal Ratchet



	<b>Item no.</b>
XPress Lock™ handle with universal ratchet, black	13-1368XP

## XPress Lock™ Handle w/o Ratchet



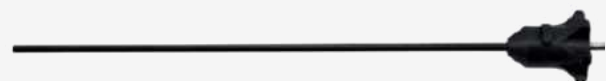
	<b>Item no.</b>
XPress Lock™ handle without ratchet, black	13-1367XP

## XPress Lock™ Handle with French Ratchet



	<b>Item no.</b>
XPress Lock™ handle with french ratchet, black	13-1369XP

## XPress Lock™ Sheaths



	Diameter		Length		Item no.
	Ø 5 mm	Ø 10 mm	330 mm	450 mm	
Sheath for XPress Lock™ and Ceramix Cut™ inserts	•		•		13-1356XP
Sheath for XPress Lock™ and Ceramix Cut™ inserts	•			•	13-1356XP-45
Sheath for XPress Lock™ and Ceramix Cut™ inserts		•	•		13-1357XP
Sheath for XPress Lock™ and Ceramix Cut™ inserts		•		•	13-1357XP-45

# CeramiX Cut™ Scissors

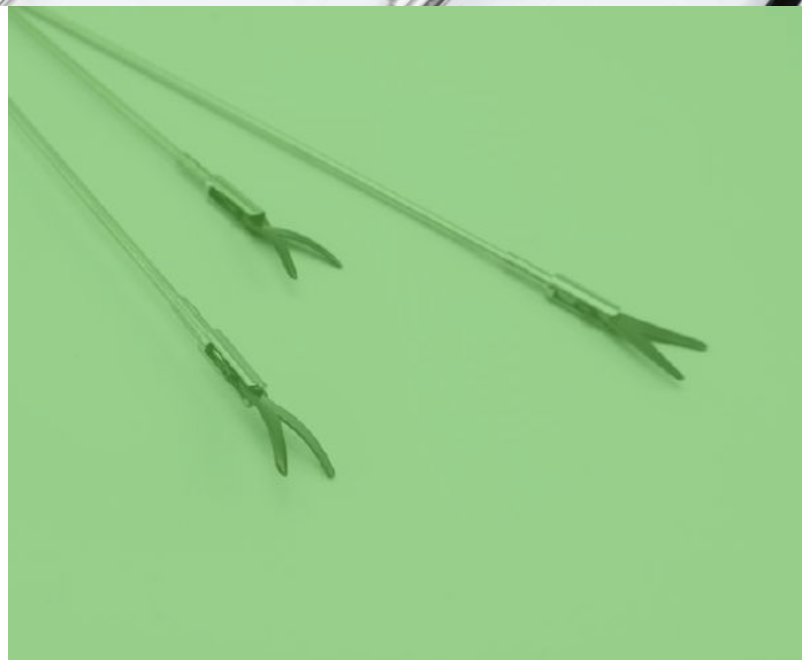
## Key Features

- **Wear-resistant**
- Suitable for use with **XPress Lock™**
- **Outstanding cutting** ability
- Reduced abrasion
- Minimal optical reflection
- **Substantially harder** than regular stainless steel



## ... more Features

- Cost-effective due to long-term stable surface
- Non-corrosive
- Temperature- and scratch-resistant
- Smooth and dense surface - easily cleanable
- More resistant to detergents and disinfectants
- Improved sliding characteristics, therefore smoother movement of the scissor blades



# Metzenbaum Scissors, Ceramix Cut™

"Slim-line", curved, double-action, Ø 5 mm, 17 mm jaw length



Line	Length		Item no.
	330 mm	450 mm	
XPress Lock™	•	•	13-1309CI
•	•	•	13-1309CI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

# Metzenbaum Scissors, Ceramix Cut™

Straight, double-action, Ø 5 mm, 17 mm jaw length

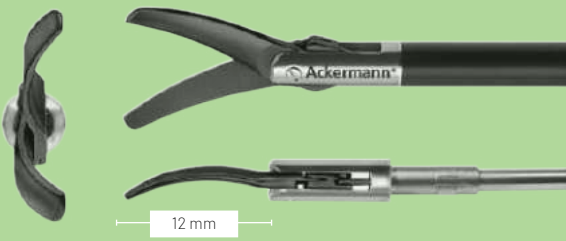


Line	Length		Item no.
	330 mm	450 mm	
XPress Lock™	•	•	13-1460CI
•	•	•	13-1460CI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

# Metzenbaum Scissors, Ceramix Cut™

Curved, double-action, Ø 5 mm, 17 mm jaw length



Line	Length		Item no.
	330 mm	450 mm	
XPress Lock™	•	•	13-1461CI
•	•	•	13-1461CI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

## Metzenbaum Scissors, Ceramix Cut™

Straight, serrated, double-action, Ø 5 mm, **17 mm jaw length**



Line	Length		Item no.
	330 mm	450 mm	
XPress Lock™	•	•	<b>13-1465CI</b>
•		•	<b>13-1465CI-45</b>

Recommended use with **Ø 5 mm sheath** and **handle w/o ratchet**

## Metzenbaum Scissors, Ceramix Cut™

Curved, serrated, double-action, Ø 5 mm, **17 mm jaw length**



Line	Length		Item no.
	330 mm	450 mm	
XPress Lock™	•	•	<b>13-1466CI</b>
•		•	<b>13-1466CI-45</b>

Recommended use with **Ø 5 mm sheath** and **handle w/o ratchet**



# System CS™ Line

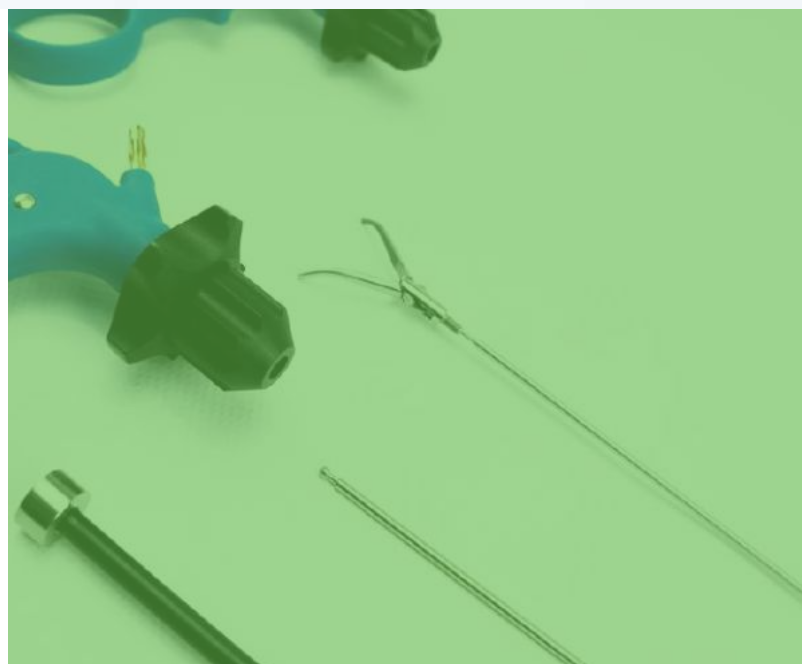
## Key Features

- Extremely easy assembly and disassembly of the instrument with **screw connection**
- Comprehensive array of instrument patterns, all hand-made in Germany
- Wide selection of **handle options**
- **Premium performance** at unbeatable value for money without having to compromise on quality







## ... more Features

- Highly economic and proven line of the laparoscopic instruments serving the medical community around the globe
- Hand-made in Germany
- HF-capabilities
- 360° rotation
- Autoclavable
- Color-coded handles available for better instrument allocation



## System CS™ Handle w/o Ratchet

	Color coding	Item no.
System CS™ handle without ratchet		13-1367CS
System CS™ handle without ratchet		13-1367FRIGELB
System CS™ handle without ratchet		13-1367FRIGRUEN
System CS™ handle without ratchet		13-1367FRIROT
System CS™ handle without ratchet		13-1367RCFI



## System CS™ Handle with Traditional Ratchet

	Color coding	Item no.
System CS™ handle with traditional ratchet		13-1368CS
System CS™ handle with traditional ratchet		13-1368FRIGELB
System CS™ handle with traditional ratchet		13-1368FRIGRUEN
System CS™ handle with traditional ratchet		13-1368FRIROT
System CS™ handle with traditional ratchet		13-1368RCFI



## System CS™ Handle with Universal Ratchet

	Color coding	Item no.
System CS™ handle with universal ratchet		13-1384CS
System CS™ handle with universal ratchet		13-1384FRIGELB
System CS™ handle with universal ratchet		13-1384FRIGRUEN
System CS™ handle with universal ratchet		13-1384FRIROT
System CS™ handle with universal ratchet		13-1384RCFI



## System CS™ Handle with French Ratchet

	Color coding	Item no.
System CS™ handle with french ratchet		13-1369CS
System CS™ handle with french ratchet		13-1369FRIGELB
System CS™ handle with french ratchet		13-1369FRIGRUEN
System CS™ handle with french ratchet		13-1369FRIROT
System CS™ handle with french ratchet		13-1369RCFI





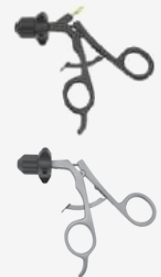
## System CS™ Standard Handle

	Type		Item no.
	insulated, HF-port	non-insulated	
System CS™ standard handle	•		13-1366SI
System CS™ standard handle		•	13-1364SI



## System CS™ Standard Handle with Traditional Ratchet

	Type		Item no.
	insulated, HF-port	non-insulated	
System CS™ standard handle with traditional ratchet	•		13-1362SITI
System CS™ standard handle with traditional ratchet		•	13-1363SRI



## System CS™ Axial Handle with Ratchet

	Item no.
System CS™ axial handle with ratchet	13-1358AXDI



# System CS™ Sheaths

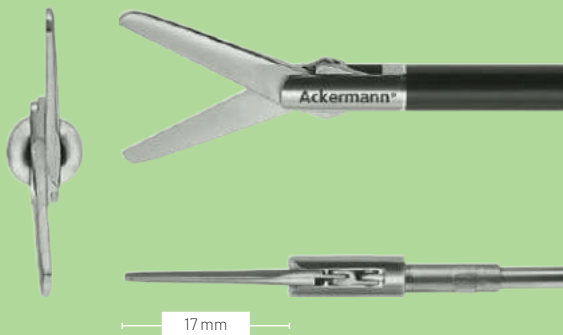


	Diameter		Length		Item no.
	Ø 5 mm	Ø 10 mm	330 mm	450 mm	
Sheath for <b>System CS™</b> inserts	•		•		<b>13-1356CS</b>
Sheath for <b>System CS™</b> inserts	•			•	<b>13-1356CS-45</b>
Sheath for <b>System CS™</b> inserts		•	•		<b>13-1357CS</b>
Sheath for <b>System CS™</b> inserts		•		•	<b>13-1357CS-45</b>



## Metzenbaum Scissors

Straight, double-action, Ø 5 mm, 17 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1460XPI
•			•	13-1460XPI-45
•		•		13-1460CI
•			•	13-1460CI-45
	•	•		13-1460CSI
	•		•	13-1460CSI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

## Metzenbaum Scissors

Straight, serrated, double-action, Ø 5 mm, 17 mm jaw length

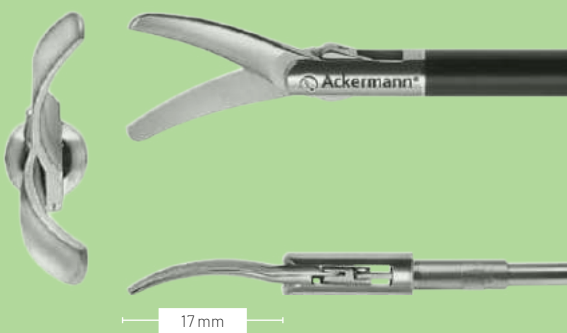


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1465XPI
•			•	13-1465XPI-45
	•	•		13-1465CSI
	•		•	13-1465CSI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

## Metzenbaum Scissors

Curved, double-action, Ø 5 mm, 17 mm jaw length

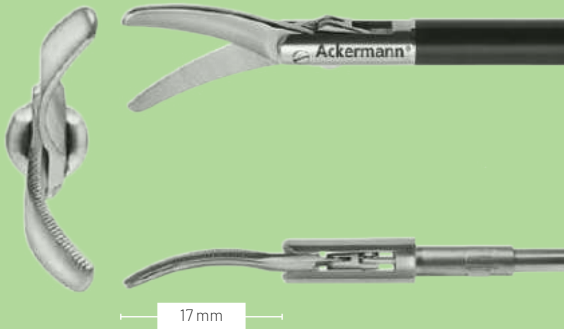


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1461XPI
•			•	13-1461XPI-45
•		•		13-1461CI
•			•	13-1461CI-45
	•	•		13-1461CSI
	•		•	13-1461CSI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

## Metzenbaum Scissors

Curved, serrated, double-action, Ø 5 mm, 17 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1466XPI
•			•	13-1466XPI-45
•		•		13-1466CI
•			•	13-1466CI-45
	•	•		13-1466CSI
	•		•	13-1466CSI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

## Metzenbaum Scissors

Curved, medium blades, double-action, Ø 5 mm, 15 mm jaw length

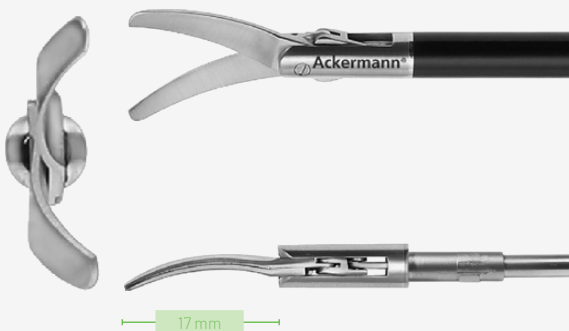


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1467XPI
•			•	13-1467XPI-45
	•	•		13-1467CSI
	•		•	13-1467CSI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

## Metzenbaum Scissors

"Slim-line", curved, double-action, Ø 5 mm, 17 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1309XPI
•			•	13-1309XPI-45
•		•		13-1309CI
•			•	13-1309CI-45
	•	•		13-1309CSI
	•		•	13-1309CSI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

## Miniature Metzenbaum Scissors

Curved, tapered down to 4 mm, double-action, Ø 5 mm, **12 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1468XPI
•			•	13-1468XPI-45
	•	•		13-1468CSI
	•		•	13-1468CSI-45

Recommended use with **Ø 5 mm sheath** and **handle w/o ratchet**

## Metzenbaum Scissors

Straight, single-action, Ø 10 mm, **22 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1655XPI
•			•	13-1655XPI-45
	•	•		13-1655CSI
	•		•	13-1655CSI-45

Recommended use with **Ø 10 mm sheath** and **handle w/o ratchet**

## Micro Scissors

Straight, single-action, Ø 5 mm, **6 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1344XPI
•			•	13-1344XPI-45
	•	•		13-1344CSI
	•		•	13-1344CSI-45

Recommended use with **Ø 5 mm sheath** and **handle w/o ratchet**

## Mirco Scissors

Curved, single-action, Ø 5 mm, 6 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1346XPI
•			•	13-1346XPI-45
	•	•		13-1346CSI
	•		•	13-1346CSI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

## Hook Scissors

Single-action, Ø 5 mm, 9 mm Jaw Length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1431XPI
•			•	13-1431XPI-45
	•	•		13-1431CSI
	•		•	13-1431CSI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

## Peritoneal Scissors

Blunt tips, single-action, Ø 5 mm, 10 mm Jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1650XPI
•			•	13-1650XPI-45
	•	•		13-1650CSI
	•		•	13-1650CSI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

## Fenestrated Grasping Forceps

Micro jaws, double-action, Ø 5 mm, 14 mm jaw length

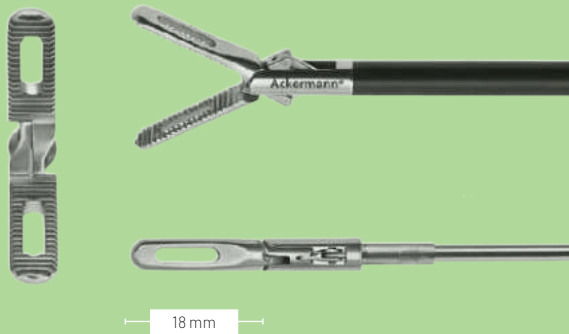


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1379XPI
•			•	13-1379XPI-45
	•	•		13-1379CSI
	•		•	13-1379CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Fenestrated Grasping Forceps

Slightly flat jaws, double-action, Ø 5 mm, 18 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1301XPI
•			•	13-1301XPI-45
	•	•		13-1301CSI
	•		•	13-1301CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Fenestrated Grasping Forceps

5 x 20 mm, round, cross serrations, double-action, Ø 5 mm, 21 mm jaw length



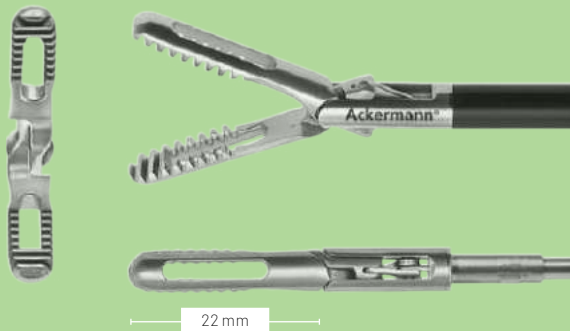
Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1382XPI
•			•	13-1382XPI-45
	•	•		13-1382CSI
	•		•	13-1382CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet



## Endoscopic Clinch Grasping Forceps

Extremely atraumatic serrated, double-action, Ø 5 mm, 22 mm jaw length

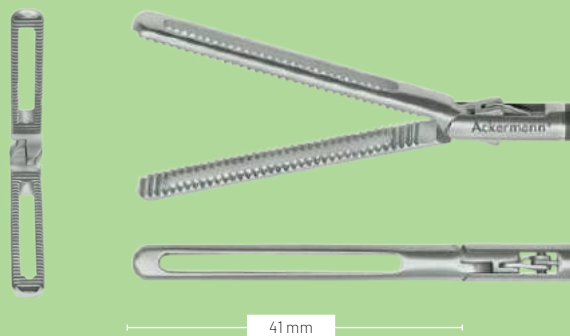


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1323XPI
•			•	13-1323XPI-45
	•	•		13-1323CSI
	•		•	13-1323CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Fenestrated Clamp

Double-action, Ø 5 mm, 41 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1343XPI
•			•	13-1343XPI-45
	•	•		13-1343CSI
	•		•	13-1343CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Hunter Grasping Forceps

Fenestrated, double-action, Ø 5 mm, 23 mm jaw length

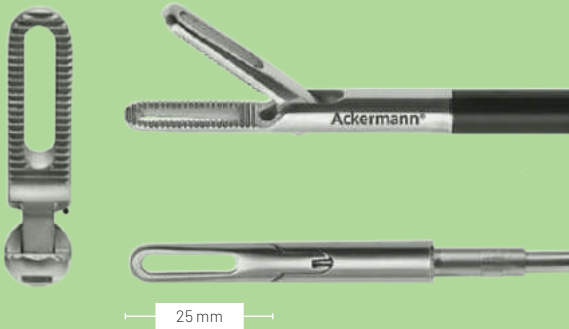


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1571XPI
•			•	13-1571XPI-45
	•	•		13-1571CSI
	•		•	13-1571CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Johan Grasping Forceps

Slightly flat jaws, single-action, Ø 5 mm, 17 mm jaw length

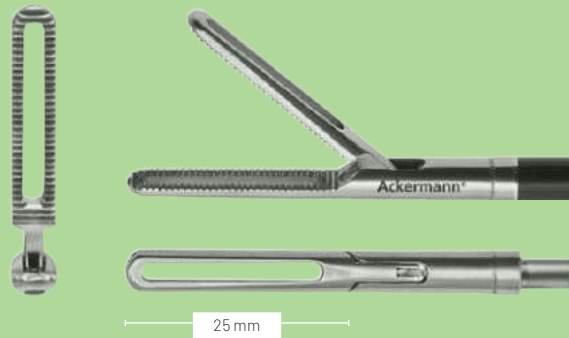


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1311XPI
•			•	13-1311XPI-45
	•	•		13-1311CSI
	•		•	13-1311CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Johan Grasping Forceps

Slightly flat jaws, single-action, Ø 5 mm, 25 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1312XPI
•			•	13-1312XPI-45
	•	•		13-1312CSI
	•		•	13-1312CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Johan Grasping Forceps

Slightly flat jaws, single-action, Ø 5 mm, 39 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1313XPI
•			•	13-1313XPI-45
	•	•		13-1313CSI
	•		•	13-1313CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Croce Olmi Grasping Forceps

Serrated, double-fenestrated, curved upwards, single-action, Ø 5 mm, **25 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1353XPI
•			•	13-1353XPI-45
	•	•		13-1353CSI
	•		•	13-1353CSI-45

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Tumor Grasping Forceps

Blunt end, double-action, Ø 5 mm, **17 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1300XPI
•			•	13-1300XPI-45
	•	•		13-1300CSI
	•		•	13-1300CSI-45

Recommended use with **Ø 5 mm sheath** and **handle w/o ratchet**

## Grasping Forceps

Atraumatic serrated, double-action, Ø 5 mm, **27 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1377XPI
•			•	13-1377XPI-45
	•	•		13-1377CSI
	•		•	13-1377CSI-45

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Maxi Fundus Grasping Forceps

Maximized grip, double-action, Ø 5 mm, **18 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1302XPI
•			•	13-1302XPI-45
	•	•		13-1302CSI
	•		•	13-1302CSI-45

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Strong Grasping Forceps

Double-action, Ø 5 mm, **13 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1303XPI
•			•	13-1303XPI-45
	•	•		13-1303CSI
	•		•	13-1303CSI-45

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Strong Grasping Forceps

Single-action, Ø 5 mm, **14 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1600XPI
•			•	13-1600XPI-45
	•	•		13-1600CSI
	•		•	13-1600CSI-45

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Alligator Grasping Forceps

Double-action, Ø 5 mm, 13 mm jaw length

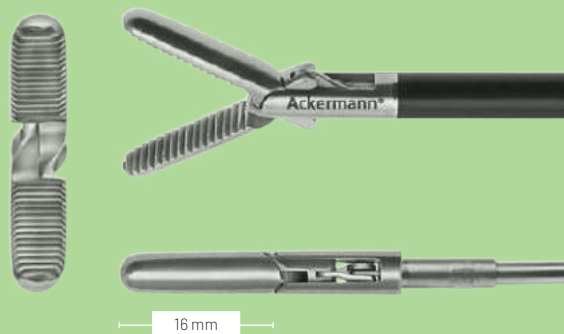


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1330XPI
•			•	13-1330XPI-45
	•	•		13-1330CSI
	•		•	13-1330CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Standard Grasping Forceps

Cross serrated, double-action, Ø 5 mm, 16 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1354XPI
•			•	13-1354XPI-45
	•	•		13-1354CSI
	•		•	13-1354CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Reddick Grasping Forceps

Double-action, Ø 5 mm, 18 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1335XPI
•			•	13-1335XPI-45
	•	•		13-1335CSI
	•		•	13-1335CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Duckbill Grasping Forceps

Cross serrated, double-action, Ø 5 mm, **13 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1421XPI</b>
•			•	<b>13-1421XPI-45</b>
	•	•		<b>13-1421CSI</b>
	•		•	<b>13-1421CSI-45</b>

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Grasping Forceps

Rounded jaws, double-action, Ø 5 mm, **15 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1305XPI</b>
•			•	<b>13-1305XPI-45</b>
	•	•		<b>13-1305CSI</b>
	•		•	<b>13-1305CSI-45</b>

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Grasping Forceps

With spoon, double-action, Ø 5 mm, **15 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1310XPI</b>
•			•	<b>13-1310XPI-45</b>
	•	•		<b>13-1310CSI</b>
	•		•	<b>13-1310CSI-45</b>

Recommended use with **Ø 5 mm sheath** and **handle w/o ratchet**

## Grasping Forceps

Rounded jaws, double-action, Ø 10 mm, 23 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1378XPI
•			•	13-1378XPI-45
	•	•		13-1378CSI
	•		•	13-1378CSI-45

Recommended use with Ø 10 mm sheath and handle w/o ratchet

## Grasping Forceps

With spoon, pointed, double-action, Ø 5 mm, 16 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1315XPI
•			•	13-1315XPI-45
	•	•		13-1315CSI
	•		•	13-1315CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Dolphin Nose Grasping Forceps

Short version, double-action, Ø 5 mm, 17 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1409XPI
•			•	13-1409XPI-45
	•	•		13-1409CSI
	•		•	13-1409CSI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

# Dolphin Nose Grasping Forceps

Long version, double-action, Ø 5 mm, **23 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1416XPI
•			•	13-1416XPI-45
	•	•		13-1416CSI
	•		•	13-1416CSI-45

Recommended use with **Ø 5 mm sheath** and **handle w/o ratchet**

# Kocher Grasping Forceps

1 x 2 teeth, single-action, Ø 5 mm, **16 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1316XPI
•			•	13-1316XPI-45
	•	•		13-1316CSI
	•		•	13-1316CSI-45

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

# Strong Atraumatic Clamp

Curved, double-action, Ø 10 mm, **40 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1324XPI
•			•	13-1324XPI-45
	•	•		13-1324CSI
	•		•	13-1324CSI-45

Recommended use with **Ø 10 mm sheath** and **handle with ratchet**



## Strong Atraumatic Clamp

Straight, double-action, Ø 10 mm, 40 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1327XPI
•			•	13-1327XPI-45
	•	•		13-1327CSI
	•		•	13-1327CSI-45

Recommended use with Ø 10 mm sheath and handle with ratchet

## Atraumatic Grasping Forceps

Single-action, Ø 5 mm, 19 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1325XPI
•			•	13-1325XPI-45
	•	•		13-1325CSI
	•		•	13-1325CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Atraumatic Grasping Forceps

Diamond serrations, double-action, Ø 5 mm, 22 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1413XPI
•			•	13-1413XPI-45
	•	•		13-1413CSI
	•		•	13-1413CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Atraumatic Grasping Forceps

Diamond serrations, curved to tip, double-action, Ø 5 mm, **22 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1414XPI
•			•	13-1414XPI-45
	•	•		13-1414CSI
	•		•	13-1414CSI-45

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Manhes Grasping Forceps

Sharp, atraumatic, single-action, Ø 5 mm, **13 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1326XPI
•			•	13-1326XPI-45
	•	•		13-1326CSI
	•		•	13-1326CSI-45

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Allis Grasping Forceps

TC inserted jaws, atraumatic, double-action, Ø 5 mm, **32 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1329XPI
•			•	13-1329XPI-45
	•	•		13-1329CSI
	•		•	13-1329CSI-45

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Allis Grasping Forceps

Rounded version, double-action, Ø 5 mm, **36 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1337XPI
•			•	13-1337XPI-45
	•	•		13-1337CSI
	•		•	13-1337CSI-45

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Allis Grasping Forceps

Short version, single-action, Ø 5 mm, **15 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1350XPI
•			•	13-1350XPI-45
	•	•		13-1350CSI
	•		•	13-1350CSI-45

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Allis Grasping Forceps

Atraumatic, 3 x 4 teeth, double-action, Ø 5 mm, **13 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1418XPI
•			•	13-1418XPI-45
	•	•		13-1418CSI
	•		•	13-1418CSI-45

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Allis Grasping Forceps

Fine axial serrations, double-action, Ø 5 mm, **34 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1515XPI</b>
•			•	<b>13-1515XPI-45</b>
	•	•		<b>13-1515CSI</b>
	•		•	<b>13-1515CSI-45</b>

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Allis Grasping Forceps

Fine axial serrations, double-action, Ø 10 mm, **34 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1510XPI</b>
•			•	<b>13-1510XPI-45</b>
	•	•		<b>13-1510CSI</b>
	•		•	<b>13-1510CSI-45</b>

Recommended use with **Ø 10 mm sheath** and **handle with ratchet**

## TC Allis Grasping Forceps

Diamond serrations, double-action, Ø 10 mm, **39 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1530XPI</b>
•			•	<b>13-1530XPI-45</b>
	•	•		<b>13-1530CSI</b>
	•		•	<b>13-1530CSI-45</b>

Recommended use with **Ø 10 mm sheath** and **handle with ratchet**

## TC Allis Grasping Forceps

Diamond serrations, double-action, Ø 5 mm, **39 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1535XPI</b>
•			•	<b>13-1535XPI-45</b>
	•	•		<b>13-1535CSI</b>
	•		•	<b>13-1535CSI-45</b>

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## T-Shaped Grasping Forceps

Double-action, Ø 10 mm, **33 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1339XPI</b>
•			•	<b>13-1339XPI-45</b>
	•	•		<b>13-1339CSI</b>
	•		•	<b>13-1339CSI-45</b>

Recommended use with **Ø 10 mm sheath** and **handle with ratchet**

## T-Shaped Grasping Forceps

Atraumatic, TC inserted jaws, double-action, Ø 10 mm, **35 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1328XPI</b>
•			•	<b>13-1328XPI-45</b>
	•	•		<b>13-1328CSI</b>
	•		•	<b>13-1328CSI-45</b>

Recommended use with **Ø 10 mm sheath** and **handle with ratchet**

## T-Shaped Grasping Forceps

Atraumatic, TC inserted jaws, double-action, Ø 10 mm, **35 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1342XPI</b>
•			•	<b>13-1342XPI-45</b>
	•	•		<b>13-1342CSI</b>
	•		•	<b>13-1342CSI-45</b>

Recommended use with **Ø 10 mm sheath** and **handle with ratchet**

## De Bakey Grasping Forceps

Atraumatic serrations, double-action, Ø 10 mm, **34 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1520XPI</b>
•			•	<b>13-1520XPI-45</b>
	•	•		<b>13-1520CSI</b>
	•		•	<b>13-1520CSI-45</b>

Recommended use with **Ø 10 mm sheath** and **handle with ratchet**

## De Bakey Grasping Forceps

Atraumatic inner teeth, double-action, Ø 5 mm, **34 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1525XPI</b>
•			•	<b>13-1525XPI-45</b>
	•	•		<b>13-1525CSI</b>
	•		•	<b>13-1525CSI-45</b>

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Babcock Grasping Forceps

Atraumatic serrated, TC jaws, double-action, Ø 10 mm, 29 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1331XPI
•			•	13-1331XPI-45
	•	•		13-1331CSI
	•		•	13-1331CSI-45

Recommended use with Ø 10 mm sheath and handle with ratchet

## Babcock Grasping Forceps

Double-action, Ø 10 mm, 29 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1341XPI
•			•	13-1341XPI-45
	•	•		13-1341CSI
	•		•	13-1341CSI-45

Recommended use with Ø 10 mm sheath and handle with ratchet

## Babcock Grasping Forceps

Serrated, double-action, Ø 10 mm, 29 mm jaw length

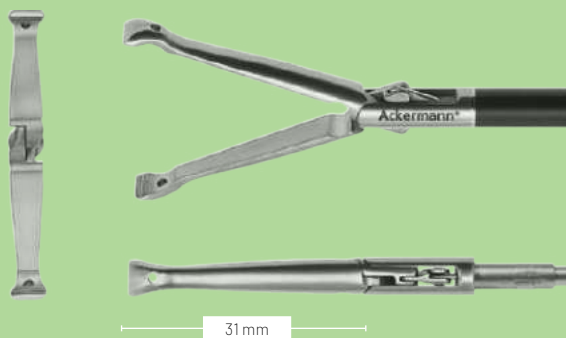


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1540XPI
•			•	13-1540XPI-45
	•	•		13-1540CSI
	•		•	13-1540CSI-45

Recommended use with Ø 10 mm sheath and handle with ratchet

## Babcock Grasping Forceps

Double-action, Ø 5 mm, 31 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1541XPI
•			•	13-1541XPI-45
	•	•		13-1541CSI
	•		•	13-1541CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Babcock - De Bakey Grasping Forceps

Atraumatic inner teeth, single-action, Ø 5 mm, 31 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1542XPI
•			•	13-1542XPI-45
	•	•		13-1542CSI
	•		•	13-1542CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Babcock Grasping Forceps

Short version, for delicate applications, double-action, Ø 5 mm, 18 mm jaw length



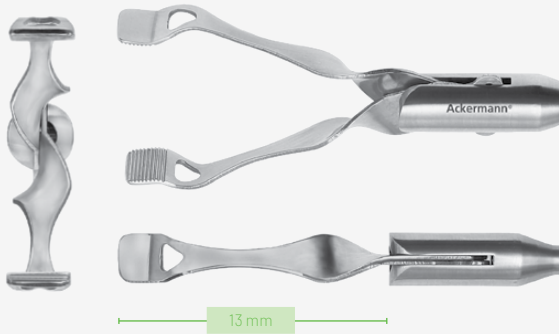
Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1543XPI
•			•	13-1543XPI-45
	•	•		13-1543CSI
	•		•	13-1543CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet



## US Backcock Grasping Forceps

Spring tension, flexible, atraumatic, double-action, Ø 10 mm, **13 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1544XPI</b>
•			•	<b>13-1544XPI-45</b>
	•	•		<b>13-1544CSI</b>
	•		•	<b>13-1544CSI-45</b>

Recommended use with **Ø 10 mm sheath** and **handle with ratchet**

## Babcock - De Bakey Grasping Forceps

Atraumatic serrations, double-action, Ø 10 mm, **29 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1545XPI</b>
•			•	<b>13-1545XPI-45</b>
	•	•		<b>13-1545CSI</b>
	•		•	<b>13-1545CSI-45</b>

Recommended use with **Ø 10 mm sheath** and **handle with ratchet**

## Duval Grasping Forceps

Fine axial serrations, double-action, Ø 10 mm, **34 mm jaw length**

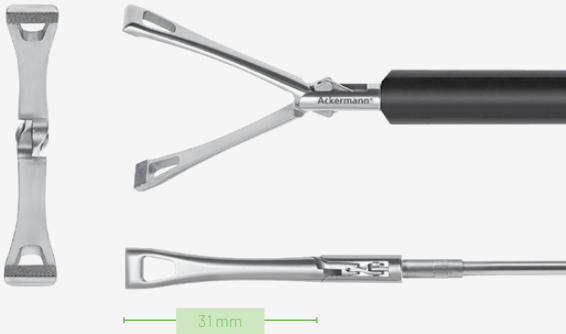


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1580XPI</b>
•			•	<b>13-1580XPI-45</b>
	•	•		<b>13-1580CSI</b>
	•		•	<b>13-1580CSI-45</b>

Recommended use with **Ø 10 mm sheath** and **handle with ratchet**

## TC Collin Grasping Forceps

Double-action, Ø 10 mm, **31 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1585XPI</b>
•			•	<b>13-1585XPI-45</b>
	•	•		<b>13-1585CSI</b>
	•		•	<b>13-1585CSI-45</b>

Recommended use with **Ø 10 mm sheath** and **handle with ratchet**

## Strong Grasping Forceps

Serrated, double-action, Ø 5 mm, **38 mm jaw length**

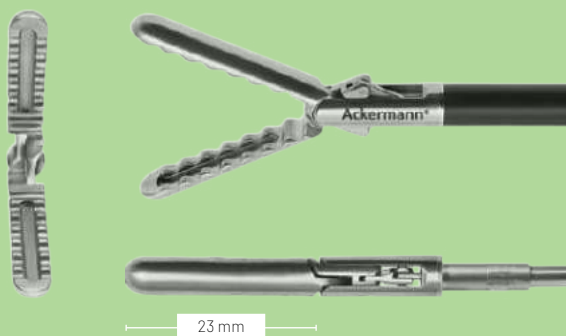


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1332XPI</b>
•			•	<b>13-1332XPI-45</b>
	•	•		<b>13-1332CSI</b>
	•		•	<b>13-1332CSI-45</b>

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Wave Grasping Forceps DG

Atraumatic wavelike serrations, double-action, Ø 5 mm, **23 mm jaw length**

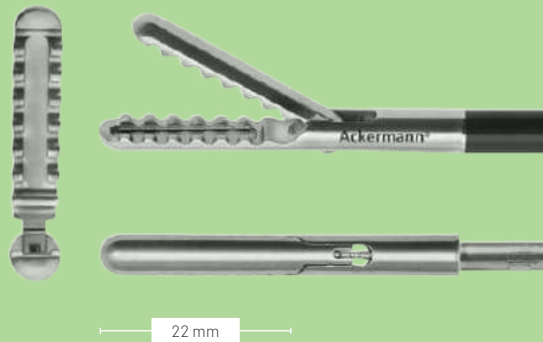


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1375XPI</b>
•			•	<b>13-1375XPI-45</b>
	•	•		<b>13-1375CSI</b>
	•		•	<b>13-1375CSI-45</b>

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Wave Grasping Forceps DG

Atraumatic wavelike serrations, single-action, Ø 5 mm, 22 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1381XPI
•			•	13-1381XPI-45
	•	•		13-1381CSI
	•		•	13-1381CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Retraction Forceps

Atraumatic inner teeth, single-action, Ø 5 mm, 23 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1380XPI
•			•	13-1380XPI-45
	•	•		13-1380CSI
	•		•	13-1380CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Cobra Grasping Forceps

Serrated, double-action, Ø 5 mm, 13 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1417XPI
•			•	13-1417XPI-45
	•	•		13-1417CSI
	•		•	13-1417CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Wave Grasping Forceps

Pointed version, conical, single-action, Ø 5 mm, 14 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1546XPI
•			•	13-1546XPI-45
	•	•		13-1546CSI
	•		•	13-1546CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Wave Grasping Forceps

Pointed version, flat, single-action, Ø 5 mm, 14 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1547XPI
•			•	13-1547XPI-45
	•	•		13-1547CSI
	•		•	13-1547CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Wave Grasping Forceps

Wide version, single-action, Ø 5 mm, 14 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1548XPI
•			•	13-1548XPI-45
	•	•		13-1548CSI
	•		•	13-1548CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Claw Forceps

Traumatic jaws, single-action, Ø 5 mm, 24 mm jaw length

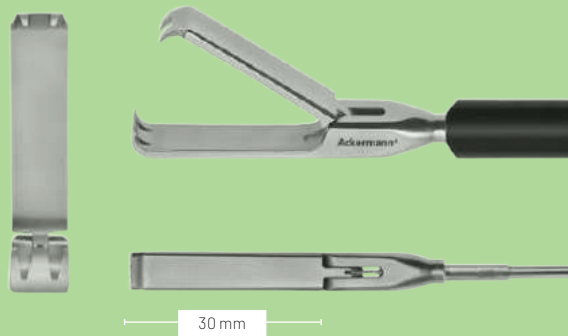


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1606XPI
•			•	13-1606XPI-45
	•	•		13-1606CSI
	•		•	13-1606CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Claw Forceps

Traumatic jaws, single-action, Ø 10 mm, 30 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1605XPI
•			•	13-1605XPI-45
	•	•		13-1605CSI
	•		•	13-1605CSI-45

Recommended use with Ø 10 mm sheath and handle with ratchet

## Tenaculum Grasping Forceps

1 x 1 sharp teeth, double-action, Ø 10 mm, 28 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1536XPI
•			•	13-1536XPI-45
	•	•		13-1536CSI
	•		•	13-1536CSI-45

Recommended use with Ø 10 mm sheath and handle with ratchet

## Tenaculum Grasping Forceps

1x1 sharp teeth, double-action, Ø 5 mm, **28 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1537XPI</b>
•			•	<b>13-1537XPI-45</b>
	•	•		<b>13-1537CSI</b>
	•		•	<b>13-1537CSI-45</b>

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Mixer Grasping Forceps

Cross serrated, double-action, Ø 5 mm, **18 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1333XPI</b>
•			•	<b>13-1333XPI-45</b>
	•	•		<b>13-1333CSI</b>
	•		•	<b>13-1333CSI-45</b>

Recommended use with **Ø 5 mm sheath** and **handle w/o ratchet**

## Mixer Clamp

45° angled, double-action, Ø 10 mm, **24 mm jaw length**

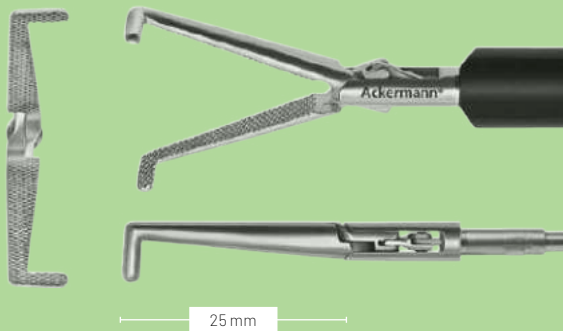


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1334XPI</b>
•			•	<b>13-1334XPI-45</b>
	•	•		<b>13-1334CSI</b>
	•		•	<b>13-1334CSI-45</b>

Recommended use with **Ø 10 mm sheath** and **handle w/o ratchet**

## Mixer Clamp

90° angled, double-action, Ø 10 mm, 25 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1336XPI
•			•	13-1336XPI-45
	•	•		13-1336CSI
	•		•	13-1336CSI-45

Recommended use with **Ø 10 mm sheath** and **handle w/o ratchet**

## Mixer Clamp

90° angled, double-action, Ø 5 mm, 26 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1376XPI
•			•	13-1376XPI-45
	•	•		13-1376CSI
	•		•	13-1376CSI-45

Recommended use with **Ø 5 mm sheath** and **handle w/o ratchet**

## Glassmann Grasping Forceps

Atraumatic jaws, double-action, Ø 5 mm, 40 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1338XPI
•			•	13-1338XPI-45
	•	•		13-1338CSI
	•		•	13-1338CSI-45

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Kocher Grasping Forceps

Axial serrations, double-action, Ø 10 mm, **45 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1550XPI</b>
•			•	<b>13-1550XPI-45</b>
	•	•		<b>13-1550CSI</b>
	•		•	<b>13-1550CSI-45</b>

Recommended use with **Ø 10 mm sheath** and **handle with ratchet**

## Kocher Grasping Forceps

Axial serrations, double-action, Ø 10 mm, **61 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1555XPI</b>
•			•	<b>13-1555XPI-45</b>
	•	•		<b>13-1555CSI</b>
	•		•	<b>13-1555CSI-45</b>

Recommended use with **Ø 10 mm sheath** and **handle with ratchet**

## De Bakey Grasping Forceps

Double-action, Ø 10 mm, **45 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		<b>13-1560XPI</b>
•			•	<b>13-1560XPI-45</b>
	•	•		<b>13-1560CSI</b>
	•		•	<b>13-1560CSI-45</b>

Recommended use with **Ø 10 mm sheath** and **handle with ratchet**



## De Bakey Grasping Forceps

Long version, double-action, Ø 10 mm, **60 mm jaw length**

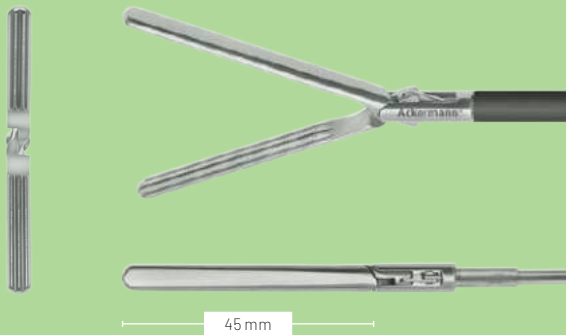


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1565XPI
•			•	13-1565XPI-45
	•	•		13-1565CSI
	•		•	13-1565CSI-45

Recommended use with **Ø 10 mm sheath** and **handle with ratchet**

## De Bakey Grasping Forceps

Double-action, Ø 5 mm, **45 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1570XPI
•			•	13-1570XPI-45
	•	•		13-1570CSI
	•		•	13-1570CSI-45

Recommended use with **Ø 5 mm sheath** and **handle with ratchet**

## Dissecting Forceps

Strong curved, serrated, double-action, Ø 5 mm, for use with 11 mm trocar, **19 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-0530XPI
•			•	13-0530XPI-45
	•	•		13-0530CSI
	•		•	13-0530CSI-45

Recommended use with **Ø 10 mm sheath** and **handle w/o ratchet**

## Dissecting Forceps

Soft curved, serrated, single-action, Ø 5 mm, for use with 11 mm trocar, **11 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1304XPI
•			•	13-1304XPI-45
	•	•		13-1304CSI
	•		•	13-1304CSI-45

Recommended use with **Ø 10 mm sheath** and **handle w/o ratchet**

## Dissecting Forceps

Strong curved, serrated, single-action, Ø 5 mm, **11 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1306XPI
•			•	13-1306XPI-45
	•	•		13-1306CSI
	•		•	13-1306CSI-45

Recommended use with **Ø 5 mm sheath** and **handle w/o ratchet**

## Dissecting Forceps

Straight, delicate serrated, single-action, Ø 5 mm, **11 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1307XPI
•			•	13-1307XPI-45
	•	•		13-1307CSI
	•		•	13-1307CSI-45

Recommended use with **Ø 5 mm sheath** and **handle w/o ratchet**

## Dissecting Forceps

Curved, delicate serrated, single-action, Ø 5 mm, 9 mm jaw length

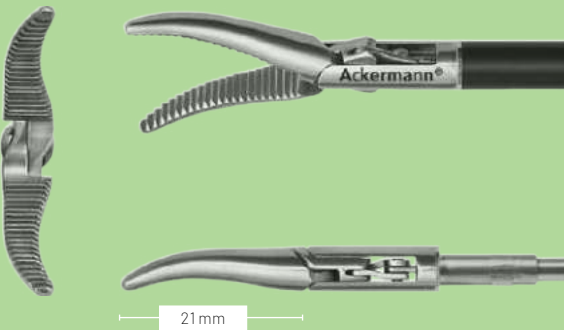


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1308XPI
•			•	13-1308XPI-45
	•	•		13-1308CSI
	•		•	13-1308CSI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

## Maryland Dissecting Forceps

Double-action, Ø 5 mm, 21 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1318XPI
•			•	13-1318XPI-45
	•	•		13-1318CSI
	•		•	13-1318CSI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

## Maryland Dissecting Forceps

Double-action, Ø 10 mm, 21 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1340XPI
•			•	13-1340XPI-45
	•	•		13-1340CSI
	•		•	13-1340CSI-45

Recommended use with Ø 10 mm sheath and handle w/o ratchet

## Maryland Dissecting Forceps

Soft curved, offset, double-action, Ø 5 mm, 17 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1322XPI
•			•	13-1322XPI-45
	•	•		13-1322CSI
	•		•	13-1322CSI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

## Maryland Dissecting Forceps

Diamond-serrated, double-action, Ø 10 mm, 25 mm jaw length

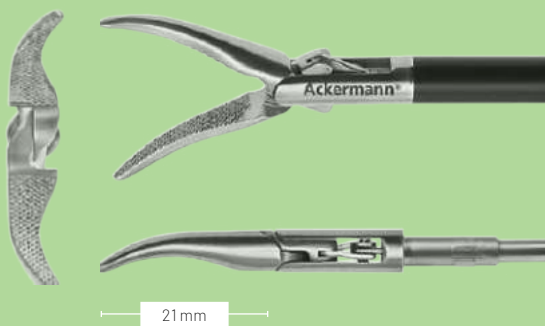


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1411XPI
•			•	13-1411XPI-45
	•	•		13-1411CSI
	•		•	13-1411CSI-45

Recommended use with Ø 10 mm sheath and handle w/o ratchet

## Maryland Dissecting Forceps

Diamond-serrated, double-action, Ø 5 mm, 21 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1412XPI
•			•	13-1412XPI-45
	•	•		13-1412CSI
	•		•	13-1412CSI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

## Maryland - De Bakey Forceps

Curved, atraumatic, double-action, Ø 5 mm, **33 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1317XPI
•			•	13-1317XPI-45
	•	•		13-1317CSI
	•		•	13-1317CSI-45

Recommended use with **Ø 5 mm sheath** and **handle w/o ratchet**

## Fenestrated Dissecting Forceps

Double-action, Ø 5 mm, **15 mm jaw length**



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1345XPI
•			•	13-1345XPI-45
	•	•		13-1345CSI
	•		•	13-1345CSI-45

Recommended use with **Ø 5 mm sheath** and **handle w/o ratchet**

## Kelly Dissecting Forceps

Double-action, Ø 5 mm, **15 mm jaw length**

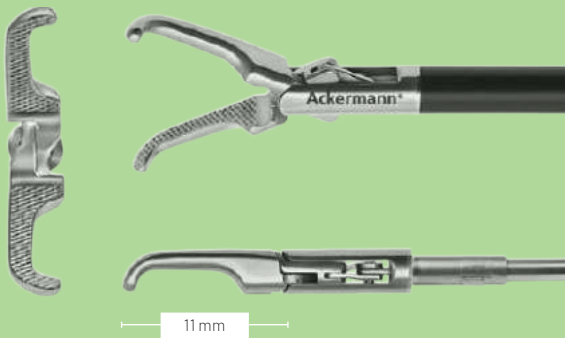


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1419XPI
•			•	13-1419XPI-45
	•	•		13-1419CSI
	•		•	13-1419CSI-45

Recommended use with **Ø 5 mm sheath** and **handle w/o ratchet**

## Dissecting Forceps

Delicate, angled, double-action, Ø 5 mm, 18 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1422XPI
•			•	13-1422XPI-45
	•	•		13-1422CSI
	•		•	13-1422CSI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

## Needleholder

Cross-serrated, single-action, Ø 5 mm, 9 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1347XPI
•			•	13-1347XPI-45
	•	•		13-1347CSI
	•		•	13-1347CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Needleholder

Cross-serrated, single-action, Ø 5 mm, 7 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1348XPI
•			•	13-1348XPI-45
	•	•		13-1348CSI
	•		•	13-1348CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Needleholder

Diamond serrated, blunt, single-action, Ø 5 mm, 13 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1349XPI
•			•	13-1349XPI-45
	•	•		13-1349CSI
	•		•	13-1349CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Needleholder

TC inserts, pointed version, single-action, Ø 5 mm, 13 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1351XPI
•			•	13-1351XPI-45
	•	•		13-1351CSI
	•		•	13-1351CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Needleholder

Pointed version, single-action, Ø 5 mm, 12 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1590XPI
•			•	13-1590XPI-45
	•	•		13-1590CSI
	•		•	13-1590CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Needleholder

Pointed version, single-action, Ø 5 mm, 10 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1595XPI
•			•	13-1595XPI-45
	•	•		13-1595CSI
	•		•	13-1595CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet

## Biopsy Punch

Single-action, Ø 5 mm, 11 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1470XPI
•			•	13-1470XPI-45
	•	•		13-1470CSI
	•		•	13-1470CSI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

## Biopsy Punch

With spike, single-action, Ø 5 mm, 11 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1475XPI
•			•	13-1475XPI-45
	•	•		13-1475CSI
	•		•	13-1475CSI-45

Recommended use with Ø 5 mm sheath and handle with ratchet



## Biopsy Punch

Hook style, single-action, Ø 5 mm, 12 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1480XPI
•			•	13-1480XPI-45
	•	•		13-1480CSI
	•		•	13-1480CSI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

## Biopsy Spoon

Single-action, Ø 5 mm, 10 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		11-1645XPI
•			•	11-1645XPI-45
	•	•		11-1645CSI
	•		•	11-1645CSI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

## Biopsy Spoon

Double-action, Ø 5 mm, 10 mm jaw length

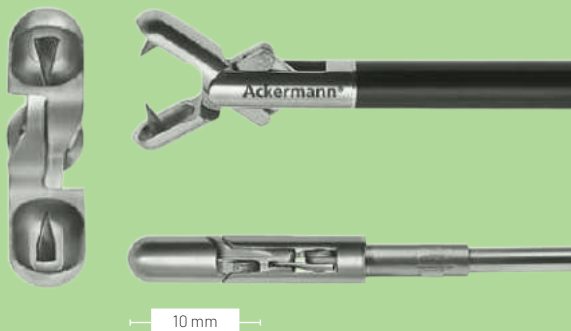


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1485XPI
•			•	13-1485XPI-45
	•	•		13-1485CSI
	•		•	13-1485CSI-45

Recommended use with Ø 5 mm sheath and handle w/o ratchet

## Biopsy Spoon

With spike, double-action, Ø 5 mm, 10 mm jaw length

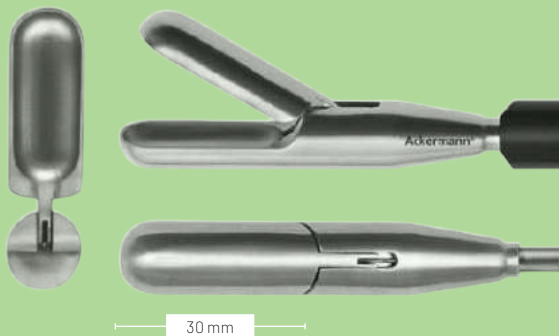


Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1490XPI
•			•	13-1490XPI-45
	•	•		13-1490CSI
	•		•	13-1490CSI-45

Recommended use with **Ø 5 mm sheath** and **handle w/o ratchet**

## Biopsy Spoon Forceps

Large version, single-action, Ø 10 mm, 30 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1660XPI
•			•	13-1660XPI-45
	•	•		13-1660CSI
	•		•	13-1660CSI-45

Recommended use with **Ø 10 mm sheath** and **handle w/o ratchet**

## Blakesley Dissecting & Biopsy Forceps

Fenestrated, single-action, Ø 5 mm, 14 mm jaw length



Line		Length		Item no.
XPress Lock™	System CS™	330 mm	450 mm	
•		•		13-1388XPI
•			•	13-1388XPI-45
	•	•		13-1388CSI
	•		•	13-1388CSI-45

Recommended use with **Ø 5 mm sheath** and **handle w/o ratchet**



# Hybrid & Single-use Instruments

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# Ti Line™ Hybrids

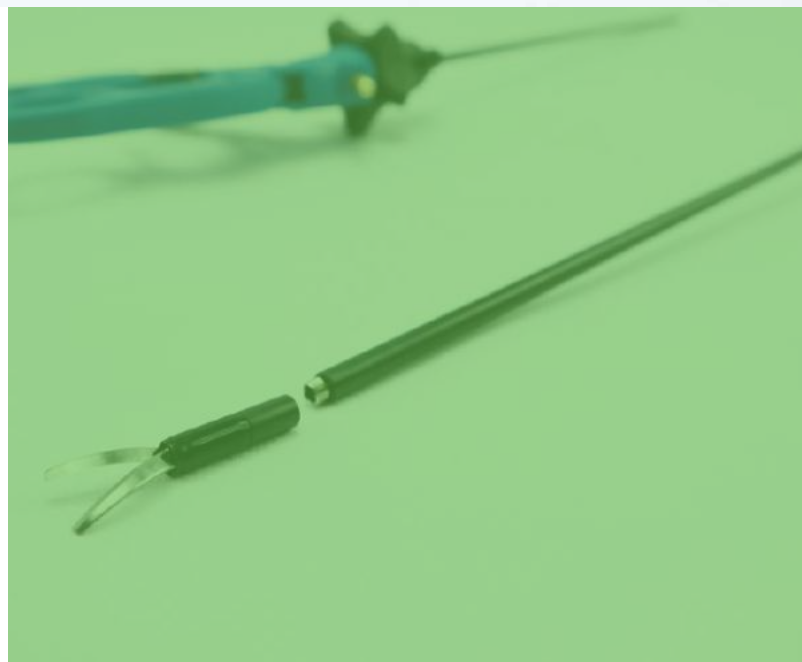
## Key Features

- **Single-use instrument tip**, combined with a **reusable handle/sheath** assembly has proven to be very economically effective
- **Superior** in terms of **performance and haptics** to most other disposable lap instruments
- Tips with **extended insulation** in order to reduce the risk of alternate site burns and arching



## ... more Features

- 360° rotatability and exceptional tactility
- Special ball and socket coupling for easy, yet fast and safe assembly
- Full array of jaw patterns
- High-quality ergonomic handles, featuring flushing port and standardized HF-connection
- Available in 330 mm and 450 mm, also accommodating bariatric procedures
- Environmentally friendly



STERILE

**Metzenbaum Scissors, Ti Line™ Tip**

For Use with 13-1383TI-(45)EC / 13-1384TI-(45)EC



	Item no.
Single-use <b>Metzenbaum scissors</b> , Ti Line™ tip, curved, Ø 5 mm, UOM 10 pcs.	<b>13-1469TI-EC</b>

STERILE

**Maryland, Ti Line™ Tip**

For Use with 13-1383TI-(45)EC / 13-1384TI-(45)EC



	Item no.
Single-use <b>Maryland grasping forceps</b> , Ti Line™ tip, double-action, Ø 5 mm, UOM 10 pcs.	<b>13-1318TI-EC</b>

STERILE

**Endoscopic Clinch, Ti Line™ Tip**

For Use with 13-1383TI-(45)EC / 13-1384TI-(45)EC



	Item no.
Single-use <b>Endoscopic Clinch grasping forceps</b> , Ti Line™ tip, double-action, Ø 5 mm, UOM 10 pcs.	<b>13-1323TI-EC</b>

STERILE

## Fenestrated Clamp, Ti Line™ Tip

For Use with 13-1383TI-(45)EC / 13-1384TI-(45)EC



Item no.

Single-use **fenestrated clamp**, Ti Line™ tip, double-action, Ø 5 mm, UOM 10 pcs.

13-1343TI-EC

STERILE

## Miniature Metzenbaum Scissors, Ti Line™ Tip

For Use with 13-1383TI-(45)EC / 13-1384TI-(45)EC



Item no.

Single-use **miniature Metzenbaum scissors**, Ti Line™ tip, Ø 5 mm, UOM 10 pcs.

13-1468TI-EC

STERILE

## Fenestrated Grasping Forceps, Ti Line™ Tip

For Use with 13-1383TI-(45)EC / 13-1384TI-(45)EC



Item no.

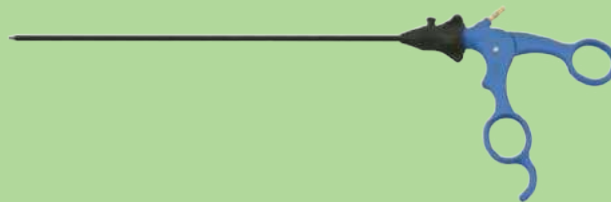
Single-use **fenestrated grasping forceps**, Ti Line™ tip, flat jaws, double-action, Ø 5 mm, UOM 10 pcs.

13-1301TI-EC



## Ti Line™ Handle w/o Ratchet

For Use with Ti Line™ Tips



	Length		Item no.
	330 mm	450 mm	
Ti Line™ handle-sheath-assembly without ratchet, blue	•		13-1383TI-EC
Ti Line™ handle-sheath-assembly without ratchet, blue		•	13-1383TI-45EC

## Ti Line™ Handle with Ratchet

For Use with Ti Line™ Tips



	Length		Item no.
	330 mm	450 mm	
Ti Line™ handle-sheath-assembly with ratchet, blue	•		13-1384TI-EC
Ti Line™ handle-sheath-assembly with ratchet, blue		•	13-1384TI-45EC

# Future Lap™ Hybrids

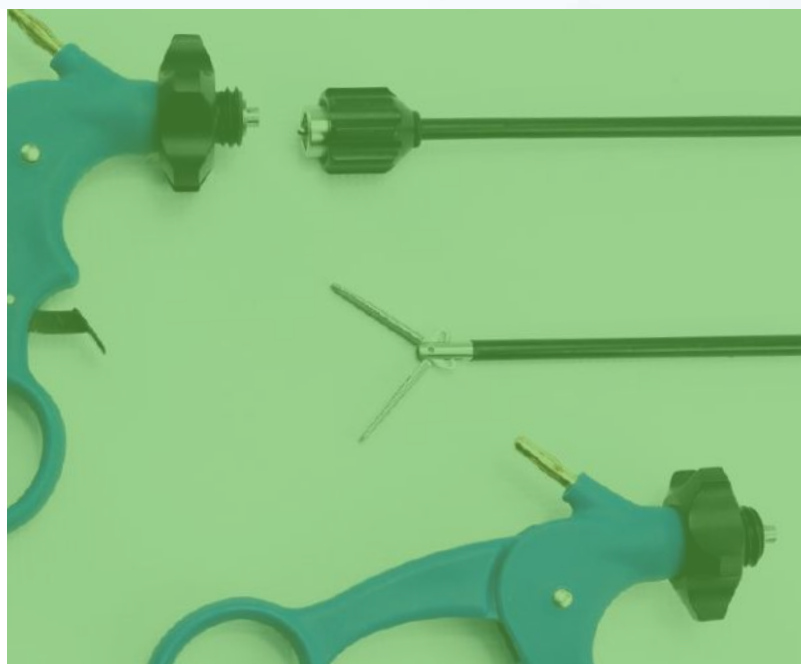
## Key Features

- Combination of a sterile, **single-use sheath/tip** assembly and a fully **reusable handle**
- Fully compatible with the System CS™ range of handles further **increasing versatility** and ability to customize
- **Risks can be radically reduced** by exchanging every component with immediate patient contact



## ... more Features

- Quick, easy and safe assembly due to ball-socket-locking between handle and sheath
- No cleaning and sterilization of the sheath necessary and degradation or even defectiveness of the insulation is almost impossible
- Future Lap™ provides the possibility of combining quality and efficiency, without having to compromise
- Lengths of 330 and 450 mm on request



STERILE

## Metzenbaum Scissors, Future Lap™ Insert

For Use with System CS™ / Endo Lock™ Handles



	Length		Item no.
	330 mm	450 mm	
Single-use <b>Metzenbaum scissors</b> , Future Lap™, curved, Ø 5 mm, UOM 10 pcs.	•		<b>13-1466DDI</b>
Single-use <b>Metzenbaum scissors</b> , Future Lap™, curved, Ø 5 mm, UOM 10 pcs.		•	<b>13-1466DDI-45</b>

STERILE

## Miniature Metzenbaum Scissors, Future Lap™ Insert

For Use with System CS™ / Endo Lock™ Handles



	Length		Item no.
	330 mm	450 mm	
Single-use <b>mini Metzenbaum scissors</b> , Future Lap™, Ø 5 mm, UOM 10 pcs.	•		<b>13-1468DDI</b>
Single-use <b>mini Metzenbaum scissors</b> , Future Lap™, Ø 5 mm, UOM 10 pcs.		•	<b>13-1468DDI-45</b>

STERILE

## Endoscopic Clinch, Future Lap™ Insert

For Use with System CS™ / Endo Lock™ Handles



	Length		Item no.
	330 mm	450 mm	
Single-use <b>Endoscopic Clinch</b> , Future Lap™, double-act., Ø 5 mm, UOM 10 pcs.	•		<b>13-1323DDI</b>
Single-use <b>Endoscopic Clinch</b> , Future Lap™, double-act., Ø 5 mm, UOM 10 pcs.		•	<b>13-1323DDI-45</b>

STERILE

## Maryland, Future Lap™ Insert

For Use with System CS™ / Endo Lock™ Handles



	Length		Item no.
	330 mm	450 mm	
Single-use <b>Maryland</b> , Future Lap™, double-act., Ø 5 mm, UOM 10 pcs.	•		<b>13-1318DDI</b>
Single-use <b>Maryland</b> , Future Lap™, double-act., Ø 5 mm, UOM 10 pcs.		•	<b>13-1318DDI-45</b>

STERILE

## Fenestrated Grasping Forceps, Future Lap™ Insert

For Use with System CS™ / Endo Lock™ Handles



	Length		Item no.
	330 mm	450 mm	
Single-use <b>fenestr. grasp.</b> , Future Lap™, flat jaws, d.-act., Ø 5 mm, UOM 10 pcs.	•		<b>13-1301DDI</b>
		•	<b>13-1301DDI-45</b>

## System CS™ Handle w/o Ratchet

For Use with Future Lap™ Inserts / System CS™ Inserts and Sheaths



	Item no.
<b>System CS™ handle</b> without ratchet, blue	<b>13-1367CS</b>

# System CS™ Handle with Ratchet

For Use with Future Lap™ Inserts / System CS™ Inserts and Sheaths



**System CS™ handle** with universal ratchet, blue

**Item no.**  
**13-1384CS**

# Single-use Instruments

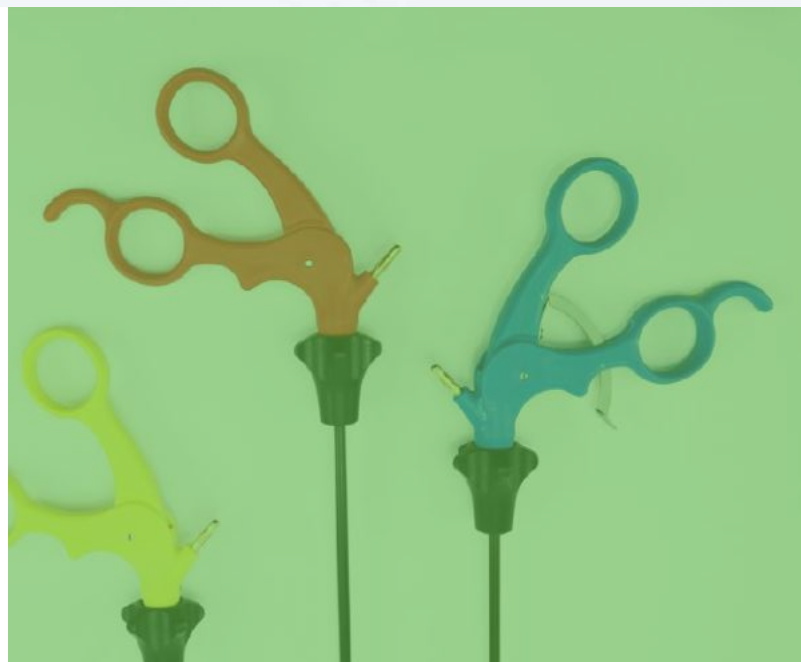
## Key Features

- **One-piece** single-use instrumentation
- Reusable-like feel and performance
- **100%** made in Germany including **sterile packaging**



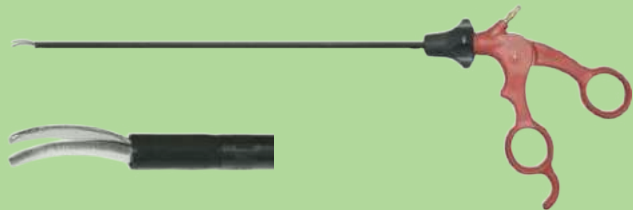
## ... more Features

- Solid colour-coded handles
- Standard length of 330 mm, other lengths and designs on request
- High-quality, ergonomic handle with HF-port
- Non-ratchet and ratchet handle available



STERILE

### Metzenbaum, Single-use



	Colour coding	Item no.
Single-use Metzenbaum with HF-port, curved, Ø 5 mm, 330 mm, UOM 6 pcs.	●	13-1466DDRH

STERILE

### Maryland, Single-use



	Length		Colour coding	Item no.
	330 mm	450 mm		
Single-use Maryland with HF-port, cross-serrated, Ø 5 mm, UOM 6 pcs.	●		●	13-1318DDRH
Single-use Maryland with HF-port, cross-serrated, Ø 5 mm, UOM 6 pcs.		●	●	13-1318DDRH-45

STERILE

### Endoscopic Clinch, Single-use



	Handle		Length		Colour coding	Item no.
	330 mm	450 mm	w/o ratchet	with ratchet		
Single-use Endo Clinch, HF-port, Ø 5 mm, UOM 6 pcs.	●		●		●	13-1323DDRH
Single-use Endo Clinch, HF-port, Ø 5 mm, mm, UOM 6 pcs.		●		●	●	13-1323DDRHR
Single-use Endo Clinch, HF-port, Ø 5 mm, UOM 6 pcs.		●		●	●	13-1323DDRHR-45

# Bipolar Instruments

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# Premium Bipolar Instruments

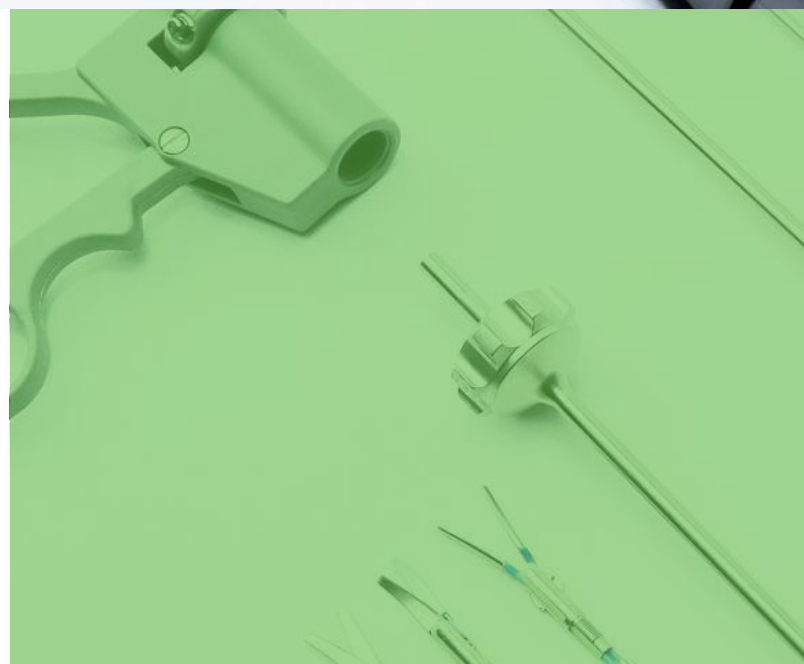
## Key Features

- **Quick exchange of electrode inserts** for different applications within only a few seconds
- Enhanced full **360° single finger rotation** results in precise control of the electrode
- Demountable into sheath, insert and handle for **convenient and reliable cleaning and component replacement**



## ... more Features

- Unique mechanism enables well adjustable opening and closing of the jaws combined with very high pressure while grasping and cutting
- Easy handling
- Standard flat plug with common bipolar cable fitting
- Double-hinge jaw design
- Ergonomic handles made of high quality PEEK polymer



## Bipolar Maryland Grasping Forceps, Premium Line

For Use with 13-1700R / 13-1700R-45 and 13-1700SI



	Length		Item no.
	330 mm	450 mm	
<b>Maryland grasping forceps</b> , bipolar insert, double-action, Ø 5 mm	•		<b>13-17011</b>
<b>Maryland grasping forceps</b> , bipolar insert, double-action, Ø 5 mm		•	<b>13-17011-45</b>

## Bipolar Fenestrated Grasping Forceps, Premium Line

For Use with 13-1700R / 13-1700R-45 and 13-1700SI



	Length		Item no.
	330 mm	450 mm	
<b>Fenestrated grasping forceps</b> , bipolar insert, double-action, Ø 5 mm	•		<b>13-17021</b>
<b>Fenestrated grasping forceps</b> , bipolar insert, double-action, Ø 5 mm		•	<b>13-17021-45</b>

## Bipolar Scissors, Premium Line

For Use with 13-1700R / 13-1700R-45 and 13-1700SI



	Length		Item no.
	330 mm	450 mm	
<b>Scissors</b> , bipolar insert, double-action, Ø 5 mm	•		<b>13-17031</b>
<b>Scissors</b> , bipolar insert, double-action, Ø 5 mm		•	<b>13-17031-45</b>

## Bipolar Micro Forceps, Premium Line

For Use with 13-1700R / 13-1700R-45 and 13-1700SI



	Length		Item no.
	330 mm	450 mm	
<b>Micro forceps</b> , bipolar insert, double-action, Ø 5 mm	•		<b>13-1704I</b>
<b>Micro forceps</b> , bipolar insert, double-action, Ø 5 mm		•	<b>13-1704I-45</b>

## Bipolar Delta Grasping Forceps, Premium Line

For Use with 13-1700R / 13-1700R-45 and 13-1700SI



	Length		Item no.
	330 mm	450 mm	
<b>Delta grasping forceps</b> , bipolar insert, double-action, Ø 5 mm	•		<b>13-1705I</b>
<b>Delta grasping forceps</b> , bipolar insert, double-action, Ø 5 mm		•	<b>13-1705I-45</b>

## Bipolar Fenestrated Grasping Forceps, Premium Line

For Use with 13-1700R / 13-1700R-45 and 13-1700SI



	Length		Item no.
	330 mm	450 mm	
<b>Fenestrated grasping forceps</b> , curved, bipolar insert, double-action, Ø 5 mm	•		<b>13-1706I</b>
<b>Fenestrated grasping forceps</b> , curved, bipolar insert, double-action, Ø 5 mm		•	<b>13-1706I-45</b>

## Bipolar Claw Forceps, Premium Line

For Use with 13-1700R / 13-1700R-45 and 13-1700SI



	Length		Item no.
	330 mm	450 mm	
<b>Claw forceps</b> , bipolar insert, double-action, Ø 5 mm	•		<b>13-17071</b>
<b>Claw forceps</b> , bipolar insert, double-action, Ø 5 mm		•	<b>13-17071-45</b>

## Bipolar Duckbill Forceps, Premium Line

For Use with 13-1700R / 13-1700R-45 and 13-1700SI



	Length		Item no.
	330 mm	450 mm	
<b>Duckbill forceps</b> , bipolar insert, double-action, Ø 5 mm	•		<b>13-17081</b>
<b>Duckbill forceps</b> , bipolar insert, double-action, Ø 5 mm		•	<b>13-17081-45</b>

## Bipolar Grasping Forceps, curved, Premium Line

For Use with 13-1700R / 13-1700R-45 and 13-1700SI



	Length		Item no.
	330 mm	450 mm	
<b>Grasping forceps</b> , curved, bipolar insert, double-action, Ø 5 mm	•		<b>13-17091</b>
<b>Grasping forceps</b> , curved, bipolar insert, double-action, Ø 5 mm		•	<b>13-17091-45</b>

## Handle for Bipolar Inserts

For Use with Premium Bipolar Instruments



	Item no.
Handle for bipolar detachable instruments	13-1700SI

## Sheath for Bipolar Inserts

For Use with Premium Bipolar Instruments



	Length		Item no.
	330 mm	450 mm	
Sheath for bipolar detachable instruments, Ø 5 mm	•		13-1700R
Sheath for bipolar detachable instruments, Ø 5 mm		•	13-1700R-45



# Standard Bipolar Instruments

## Key Features

- Easy and **quick assembly and disassembly** into handle and insert
- Wide range of **different electrode patterns** available



## ... more Features

- Simplified cleaning
- Two different handle types available
- By using an adapter connectable to nearly any common HF-unit





## Bipolar Fenestrated Forceps, Standard Line

For Use with 13-1647SI / 13-1647SI-45 and 13-1646SI



	Length		Item no.
	330 mm	450 mm	
<b>Forceps</b> , fenestrated, bipolar insert, Ø 5 mm	•		<b>13-1630IW0</b>
<b>Forceps</b> , fenestrated, bipolar insert, Ø 5 mm		•	<b>13-1630IW0-45</b>

## Bipolar Scissors, Standard Line

For Use with 13-1647SI / 13-1647SI-45 and 13-1646SI



	Length		Item no.
	330 mm	450 mm	
<b>Scissors</b> , fenestrated, bipolar insert, Ø 5 mm	•		<b>13-1633IW0</b>
<b>Scissors</b> , fenestrated, bipolar insert, Ø 5 mm		•	<b>13-1633IW0-45</b>

## Bipolar Forceps, Standard Line

For Use with 13-1647SI / 13-1647SI-45 and 13-1646SI



	Length		Item no.
	330 mm	450 mm	
<b>Forceps</b> , short, wide jaw, bipolar insert, Ø 5 mm	•		<b>13-1634IW0</b>
<b>Forceps</b> , short, wide jaw, bipolar insert, Ø 5 mm		•	<b>13-1634IW0-45</b>

## Bipolar Forceps, Bipolar Insert

For Use with 13-1647SI / 13-1647SI-45 and 13-1646SI



	Length		Item no.
	330 mm	450 mm	
<b>Forceps</b> , wide jaw, bipolar insert, Ø 5 mm	•		<b>13-1635IWO</b>
<b>Forceps</b> , wide jaw, bipolar insert, Ø 5 mm		•	<b>13-1635IWO-45</b>

## Bipolar Micro Tip, Standard Line

For Use with 13-1647SI / 13-1647SI-45 and 13-1646SI



	Length		Item no.
	330 mm	450 mm	
<b>Micro tip</b> , bipolar insert, Ø 5 mm	•		<b>13-1640IWO</b>
<b>Micro tip</b> , bipolar insert, Ø 5 mm		•	<b>13-1640IWO-45</b>

## Bipolar Forceps, w/o Nose, Standard Line

For Use with 13-1647SI / 13-1647SI-45 and 13-1646SI



	Length		Item no.
	330 mm	450 mm	
<b>Forceps without nose</b> , bipolar insert, Ø 5 mm	•		<b>13-1642IWO</b>
<b>Forceps without nose</b> , bipolar insert, Ø 5 mm		•	<b>13-1642IWO-45</b>

## Bipolar Maryland Grasping Forceps, Standard Line

For Use with 13-1647SI / 13-1647SI-45 and 13-1646SI



	Length		Item no.
	330 mm	450 mm	
Maryland grasping forceps, bipolar insert, Ø 5 mm	•		13-1645IWO
Maryland grasping forceps, bipolar insert, Ø 5 mm		•	13-1645IWO-45

## Pistol Handle for Bipolar Inserts

For Use with Standard Bipolar Instruments



	Item no.
Pistol handle for bipolar modular forceps	13-1646SI

## Slide Handle for Bipolar Inserts

For Use with Standard Bipolar Instruments



	Item no.
Slide handle for bipolar modular forceps	13-1647SI

# Endoscopic Clip Appliers & Removers

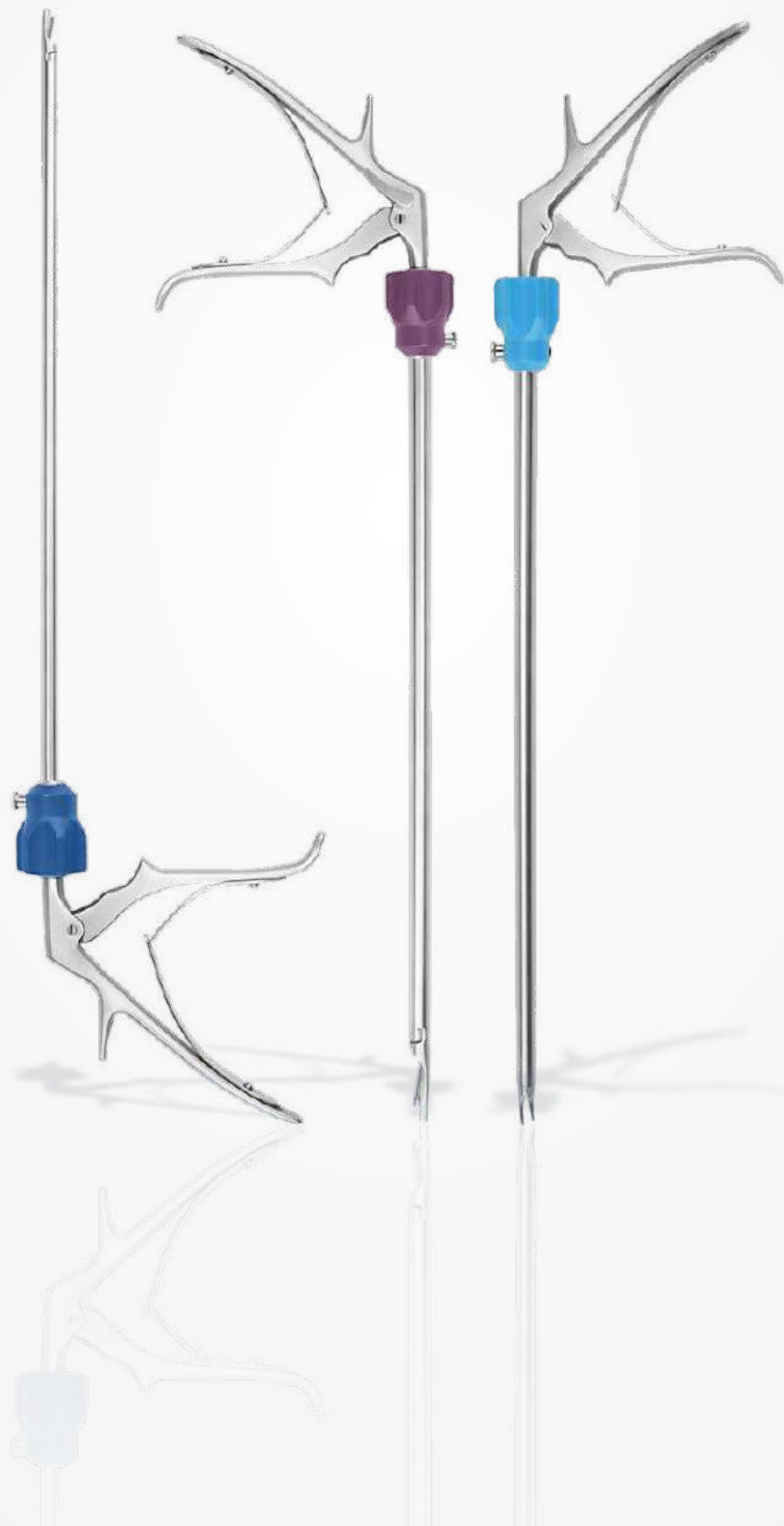
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Endoscopic VeSeal™ Appliers / **p. 168 - 169**

Endoscopic Polymer Clip Appliers & Removers / **p. 170 - 171**





# Europclip™ Endo Surgery Appliers

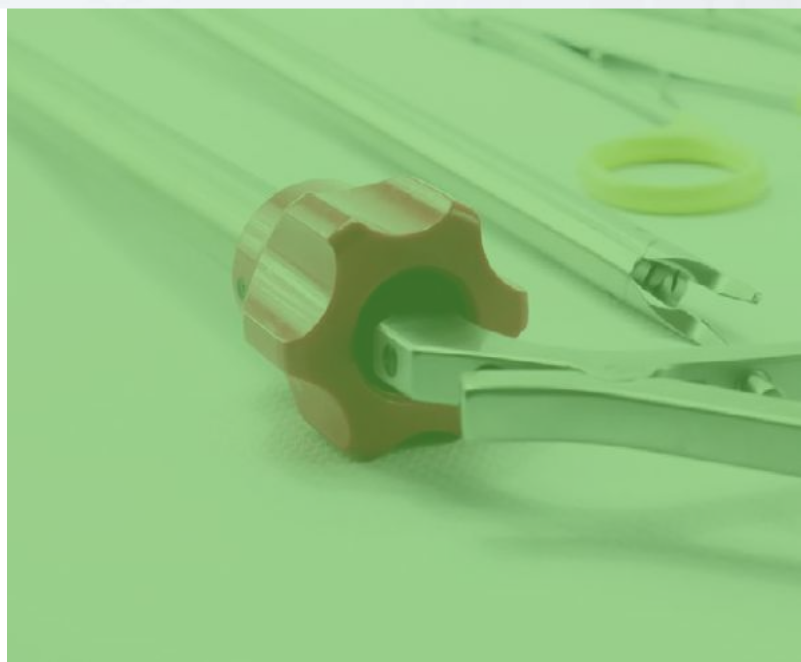
## Key Features

- Solid **double-action jaw mechanism** for extremely precise and reliable closing action
- **Diamond dusted** jaws for maximum clip grip
- Multiple **handle options** to meet every physicians preference
- **No backlash** when activated in addition to tightly tolerated jaw dimensions

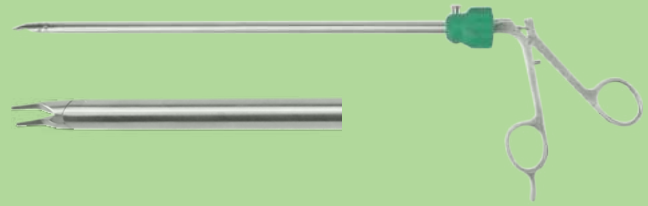


### ... more Features

- Flush port for validated cleaning and reprocessing
- 360° color coded rotating knob with audio and tactile feedback
- Perfectly weight-balanced
- Bariatric instruments available on request



## Pistol Handle Appliers for Endo Surgery



Description	Diameter	Color coding	Item no.
	Ø 5 mm   Ø 10 mm   Ø 12.5 mm		
Endo Appliers for <b>small</b> Europclips™, pistol handle, rotatable, 330 mm	•	●	13-1613-105AS
Endo Appliers for <b>medium</b> Europclips™, pistol handle, rotatable, 330 mm	•	●	13-1610AS
Endo Appliers for <b>medium-large</b> Europclips™, pistol handle, rotatable, 330 mm	•	●	13-1615AS
Endo Appliers for <b>large</b> Europclips™, pistol handle, rotatable, 330 mm	•	●	13-1613-106AS

## Townsend Handle Appliers for Endo Surgery



Description	Diameter	Color coding	Item no.
	Ø 5 mm   Ø 10 mm   Ø 12.5 mm		
Endo Appliers for <b>small</b> Europclips™, townsend handle, rotatable, 330 mm	•	●	13-1613-105A
Endo Appliers for <b>medium</b> Europclips™, townsend handle, rotatable, 330 mm	•	●	13-1610A
Endo Appliers for <b>medium-large</b> Europclips™, townsend h., rotatable, 330 mm	•	●	13-1615A
Endo Appliers for <b>large</b> Europclips™, townsend handle, rotatable, 330 mm	•	●	13-1613-106A

# VeSeal™ Endo Surgery Appliers

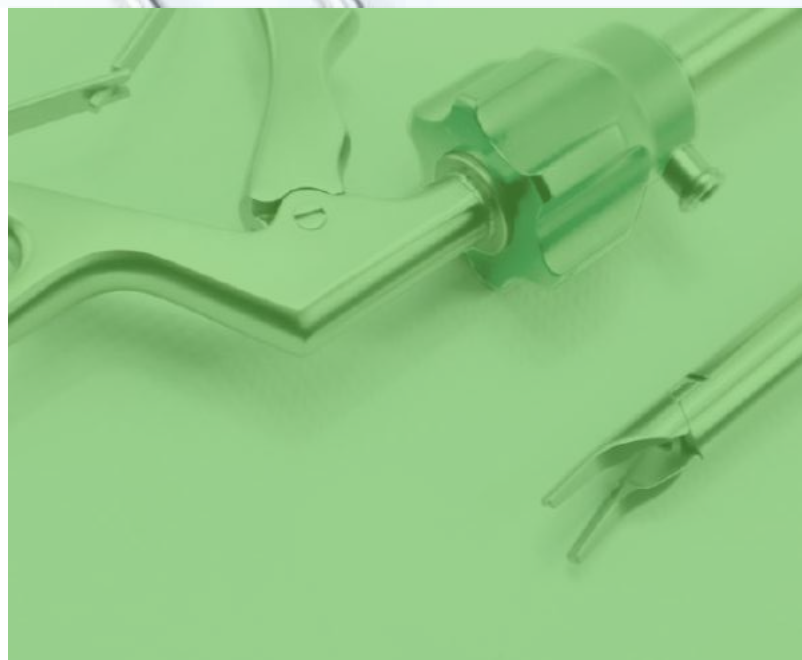
## Key Features

- Solid **double-action jaw mechanism** for extremely precise and reliable closing action
- Precision milled **grooves** inside the jaw for perfect clip fitting
- **No backlash** when activated in addition to tightly tolerated jaw dimensions
- Ergonomic handle design



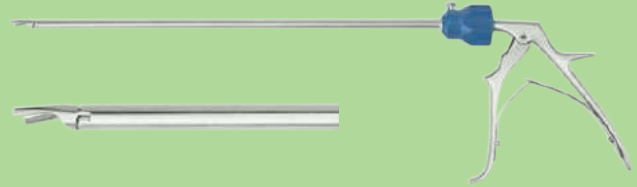
## ... more Features

- Flush port for validated cleaning and reprocessing
- 360° color coded rotating knob with audio and tactile feedback
- Perfectly weight-balanced
- Bariatric instruments available on request





## Townsend Handle Appliers for Endo Surgery



Description	Diameter			Color coding	Item no.
	Ø 7 mm	Ø 10 mm	Ø 12.5 mm		
Endo Appliers for <b>small</b> VeSeal™ clips, townsend handle, rot., demountable, 330 mm	•			●	13-1613-102
Endo Appliers for <b>medium</b> VeSeal™ clips, townsend handle, rot., demountable, 330 mm		•		○	13-1613-103
Endo Appliers for <b>medium-large</b> VeSeal™ clips, townsend handle, rot., dem., 330 mm		•		●	13-1613
Endo Appliers for <b>large</b> VeSeal™ clips, townsend handle, rot., demountable, 330 mm			•	●	13-1613-104

# Polymer Clip Endo Surgery Appliers

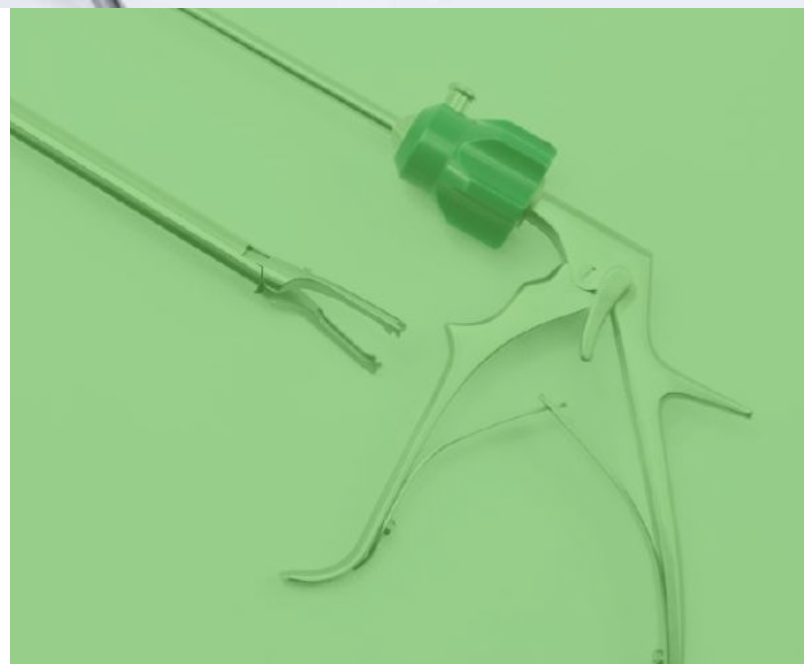
## Key Features

- **Unique thumb-operated locking mechanism** integrated into the handle to prevent unintentional clip closure during travel inside the abdomen
- Complete range of Endoscopic appliers and clip removers
- **No backlash** when activated in addition to tightly tolerated jaw dimensions
- Ergonomic handle design

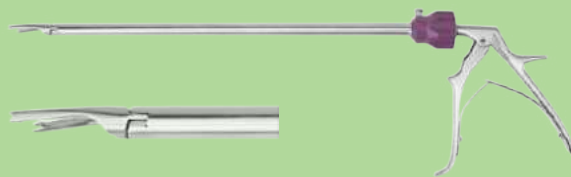


## ... more Features

- Flush port for validated cleaning and reprocessing
- 360° color coded rotating knob with audio and tactile feedback
- Perfectly weight-balanced
- Bariatric instruments available on request

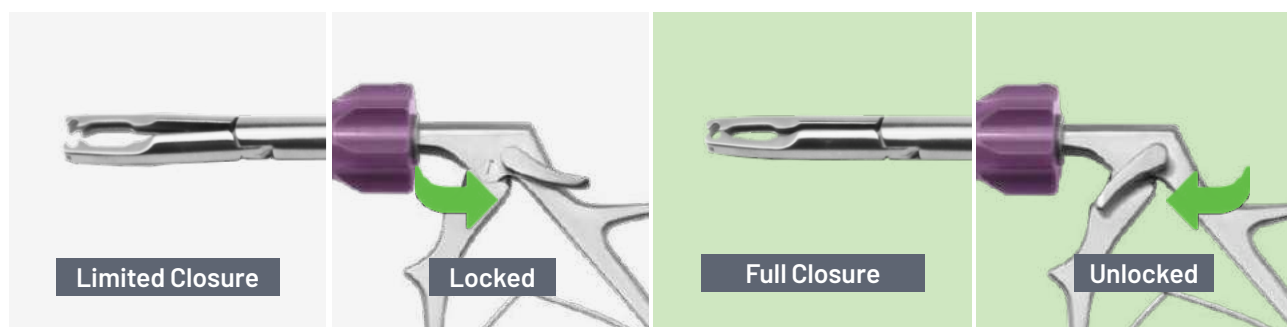


## Townsend Handle Appliers for Endo Surgery

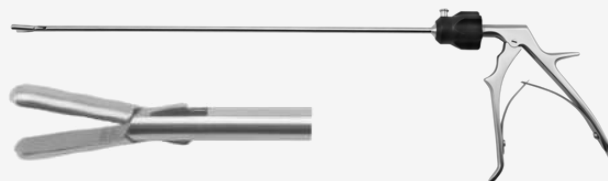


Description	Diameter		Color coding	Item no.
	Ø 5 mm	Ø 10 mm		
Endo Appliers for <b>medium-large</b> polyclips, townsend handle, rotatable, 330 mm	•		●	13-1615AS-P
Endo Appliers for <b>large</b> polyclips, townsend handle, rotatable, 330 mm		•	●	13-1613-106AS-P
Endo Appliers for <b>extra-large</b> polyclips, townsend handle, rotatable, 330 mm		•	●	13-1613-108AS-P

## How to use the Endoscopic Clip Appliers



## Townsend Handle Removers for Endo Surgery



Description	Item no.
Remover for <b>medium, medium-large</b> and <b>large</b> polymer clips, Ø 5 mm, 330 mm	13-1613PR
Remover for <b>large</b> and <b>extra-large</b> polymer clips, Ø 10 mm, 330 mm	13-1615PR

# Speciality Instruments

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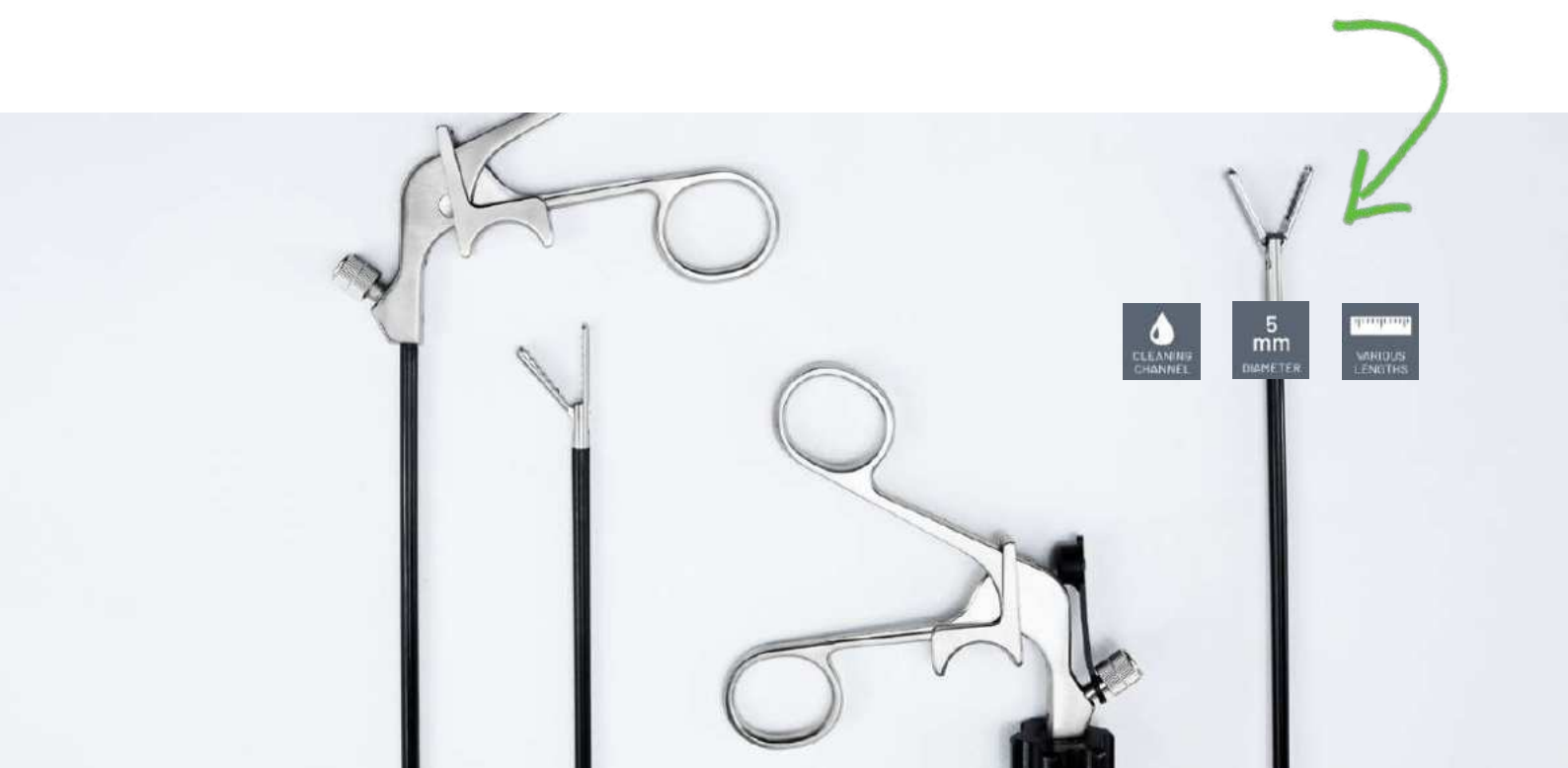




# System ADG™ & DG™

## Key Features

- **Excellent** tissue grasping control
- **Atraumatic wave or retraction jaws** in single- or double-action design
- One-piece instrument with **slide ratchet**



## ... more Features

- Rotatable (System ADG™) or non-rotatable (System DG™) instrument line with cleaning port
- 5 mm sheath diameter
- With 360 mm or 450 mm working length available
- Flush port for easy and convenient reprocessing



## System ADG™ Wave Grasping Forceps, Rotatable

Single-action Jaws



	Length		Item no.
	360 mm	450 mm	
<b>Wave grasper</b> with slide ratchet, flushable, single-action, rotatable, Ø 5 mm	•		<b>13-1381ADG</b>
<b>Wave grasper</b> with slide ratchet, flushable, single-action, rotatable, Ø 5 mm		•	<b>13-1381ADG-45</b>

## System ADG™ Wave Grasping Forceps, Rotatable

Double-action Jaws



	Length		Item no.
	360 mm	450 mm	
<b>Wave grasper</b> with slide ratchet, flushable, double-action, rotatable, Ø 5 mm	•		<b>13-1375ADG</b>
<b>Wave grasper</b> with slide ratchet, flushable, double-action, rotatable, Ø 5 mm		•	<b>13-1375ADG-45</b>

## System ADG™ Retraction Forceps, Rotatable



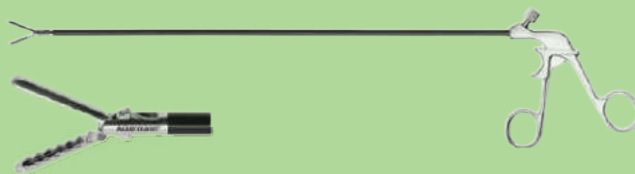
	Length		Item no.
	360 mm	450 mm	
<b>Retraction forceps</b> with slide ratchet, flushable, rotatable, Ø 5 mm	•		<b>13-1380ADG</b>
<b>Retraction forceps</b> with slide ratchet, flushable, rotatable, Ø 5 mm		•	<b>13-1380ADG-45</b>

## System DG™ Wave Grasping Forceps



	Length		Item no.
	360 mm	450 mm	
<b>Wave grasper</b> with slide ratchet, flushable, single-action, Ø 5 mm	•		<b>13-1381DG</b>
<b>Wave grasper</b> with slide ratchet, flushable, single-action, Ø 5 mm		•	<b>13-1381DG-45</b>

## System DG™ Wave Grasping Forceps



	Length		Item no.
	360 mm	450 mm	
<b>Wave grasper</b> with slide ratchet, flushable, double-action, Ø 5 mm	•		<b>13-1375DG</b>
<b>Wave grasper</b> with slide ratchet, flushable, double-action, Ø 5 mm		•	<b>13-1375DG-45</b>

## System DG™ Retraction Forceps



	Length		Item no.
	360 mm	450 mm	
<b>Retraction forceps</b> with slide ratchet, flushable, Ø 5 mm	•		<b>13-1380DG</b>
<b>Retraction forceps</b> with slide ratchet, flushable, Ø 5 mm		•	<b>13-1380DG-45</b>





# Axial Needleholders

## Key Features

- Extremely light-weight and ergonomic **aluminum handles**
- Total weight of **under 120 g**
- **Maneuverability is enhanced** while reducing fatigue
- Unique overload protection to **avoid needle breakage**

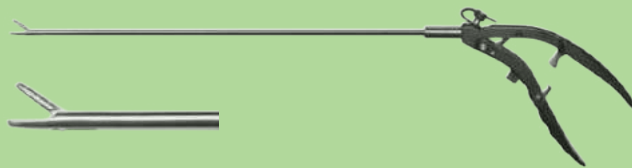


## ... more Features

- Adjustable ratchet
- Despite its weight very robust and durable
- Instrument cleaning port
- 5 mm sheath diameter
- With 330 mm or 450 mm working length

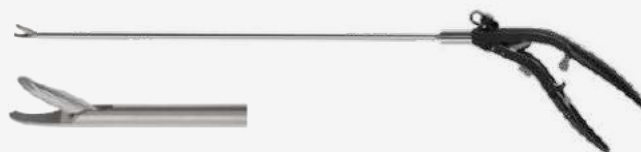


## Axial Needleholders, Straight Jaws



	Length		Item no.
	330 mm	450 mm	
<b>Axial needleholder</b> , straight jaws, angled handle, Ø 5 mm	•		<b>13-1591P</b>
<b>Axial needleholder</b> , straight jaws, angled handle, Ø 5 mm		•	<b>13-1591P-45</b>

## Axial Needleholders, Right Curved Jaws



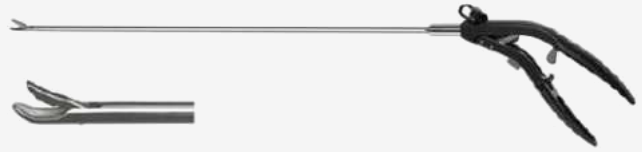
	Length		Item no.
	330 mm	450 mm	
<b>Axial needleholder</b> , right curved jaws, angled handle, Ø 5 mm	•		<b>13-1593P</b>
<b>Axial needleholder</b> , right curved jaws, angled handle, Ø 5 mm		•	<b>13-1593P-45</b>

## Axial Needleholders, Left Curved Jaws



	Length		Item no.
	330 mm	450 mm	
<b>Axial needleholder</b> , left curved jaws, angled handle, Ø 5 mm	•		<b>13-1594P</b>
<b>Axial needleholder</b> , left curved jaws, angled handle, Ø 5 mm		•	<b>13-1594P-45</b>

## Axial Needleholders, Self-uprighting Jaws



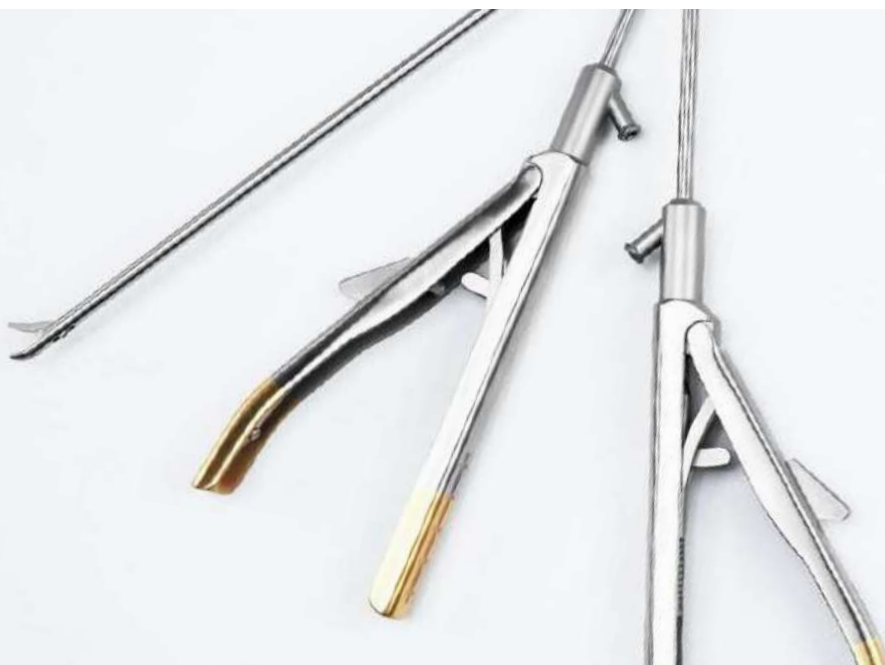
	Length		Item no.
	330 mm	450 mm	
<b>Axial needleholder</b> , self-upright. jaws, angled handle, Ø 5 mm	•		<b>13-1590PSFU</b>
<b>Axial needleholder</b> , self-upright. jaws, angled handle, Ø 5 mm		•	<b>13-1590PSFU-45</b>



# ETH Needleholders

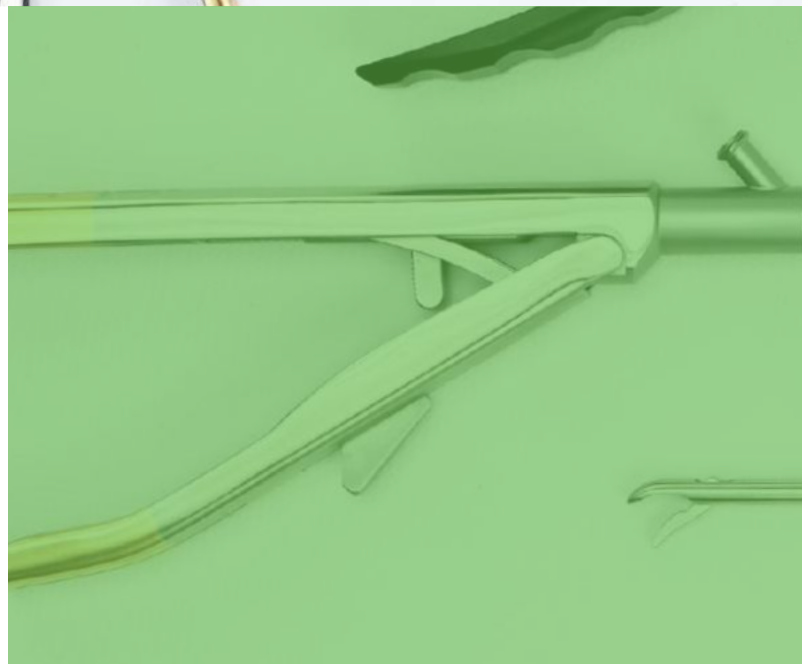
## Key Features

- **Integrated locking mechanism** with automated spring action for precise adjustment and controlled tensioning
- Unique overload protection to **avoid needle breakage**
- Ergonomic **axial handle**
- To be used with any **industry-standard surgical needle**



## ... more Features

- Self-uprighting needleholder available
- Instrument cleaning port
- 5 mm sheath diameter
- Available in 330 mm or 450 mm working length
- Break-proof stainless steel



## ETH Needleholders, Straight Jaws



	Length		Item no.
	330 mm	450 mm	
ETH needleholder, straight jaws, Ø 5 mm	•		13-1591ET
ETH needleholder, straight jaws, Ø 5 mm		•	13-1591ET-45

## ETH Needleholders, Right Curved Jaws



	Length		Item no.
	330 mm	450 mm	
ETH needleholder, right curved jaws, Ø 5 mm	•		13-1593ET
ETH needleholder, right curved jaws, Ø 5 mm		•	13-1593ET-45

## ETH Needleholders, Left Curved Jaws



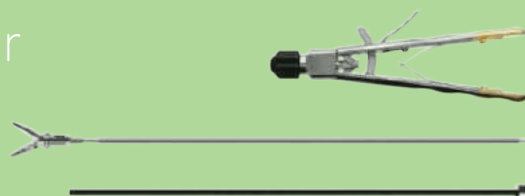
	Length		Item no.
	330 mm	450 mm	
ETH needleholder, left curved jaws, Ø 5 mm	•		13-1594ET
ETH needleholder, left curved jaws, Ø 5 mm		•	13-1594ET-45

## ETH Needleholders, Self-uprighting Jaws



	Length		Item no.
	330 mm	450 mm	
ETH needleholder, self-uprighting jaws, Ø 5 mm	•		13-1590ETSFU
ETH needleholder, self-uprighting jaws, Ø 5 mm		•	13-1590ETSFU-45

## Three-Piece Modular Needleholder



Set Components	Item no.
System CS™ Needleholder, pointed version, single-action, 12 mm jaw length, Ø 5 mm, 330 mm	13-1590CSI
+ Sheath for System CS™ inserts, Ø 5 mm, 330 mm	13-1356CS
+ Axial handle for System CS™	13-1358AXDI





# Snake Retractors

## Key Features

- Create a large and highly atraumatic surface to **safely retract organs and other fragile tissue** simply by turning the actuating knob on the handle
- May also be used for **adjustable gastric banding**



## ... more Features

- 5 mm sheath diameter at 340 and 450 mm working lengths
- Break-proof stainless steel
- Instrument flush port allows for convenient and safe cleaning



## Snake Retractors, Triangular, Angled in Sheath



	Working length		Total length		Item no.
	60 mm	80 mm	340 mm	450 mm	
Snake retractor, triangular, angled in sheath, Ø 5 mm		•	•		13-1665
Snake retractor, triangular, angled in sheath, Ø 5 mm		•		•	13-1665-45
Snake retractor, triangular, angled in sheath, Ø 5 mm	•		•		13-1665-6
Snake retractor, triangular, angled in sheath, Ø 5 mm	•			•	13-1665-6-45

## Snake Retractors, Triangular, Straight in Sheath



	Working length			Total length		Item no.
	60 mm	80 mm	120 mm	340 mm	450 mm	
Snake retractor, triangular, straight in sheath, Ø 5 mm		•		•		13-1666
Snake retractor, triangular, straight in sheath, Ø 5 mm		•			•	13-1666-45
Snake retractor, triangular, straight in sheath, Ø 5 mm	•			•		13-1666-6
Snake retractor, triangular, straight in sheath, Ø 5 mm	•				•	13-1666-6-45
Snake retractor, triangular, straight in sheath, Ø 5 mm			•	•		13-1666-12
Snake retractor, triangular, straight in sheath, Ø 5 mm			•		•	13-1666-12-45

## Snake Retractors, Angled in Sheath



	Type			Length		Item no.
	straight	curved right	curved left	340 mm	450 mm	
Snake retractor, angled in sheath, Ø 5 mm	•			•		13-1667
Snake retractor, angled in sheath, Ø 5 mm	•				•	13-1667-45
Snake retractor, angled in sheath, Ø 5 mm		•		•		13-1667R
Snake retractor, angled in sheath, Ø 5 mm		•			•	13-1667R-45
Snake retractor, angled in sheath, Ø 5 mm			•	•		13-1667L
Snake retractor, angled in sheath, Ø 5 mm			•		•	13-1667L-45

## Snake Retractors, Straight, Angled in Sheath



	Item no.
Snake retractor, straight, angled in sheath, Ø 5 mm, 340 mm	13-1661

## Snake Retractors, Circular



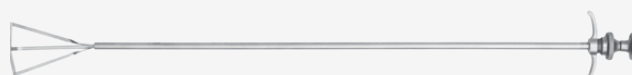
	Sheath type		Item no.
	straight	angled	
Snake retractor, circular, Ø 5 mm, 340 mm	•		13-1662
Snake retractor, circular, Ø 5 mm, 340 mm		•	13-1663

## Snake Retractors, Hooked



	Type		Item no.
	curved right	curved left	
Snake retractor, hooked, Ø 5 mm, 340 mm	•		13-1664R
Snake retractor, hooked, Ø 5 mm, 340 mm		•	13-1664L

## Fan Retractors



	Type			Total length		Item no.
	straight	curved	angled	350 mm	450 mm	
Fan retractor, Ø 5 mm	•					13-1670
Fan retractor, Ø 5 mm		•		•		13-1675
Fan retractor, Ø 5 mm		•			•	13-1675-45
Fan retractor, Ø 5 mm			•			13-1677

## Finger Retractors, Angled Fan, Deflectable



	Diameter		Type		Total length		Item no.
	Ø 5 mm	Ø 10 mm	3-Finger	5-Finger	330 mm	450 mm	
Finger retractor, deflectable	•		•		•		13-1671
Finger retractor, deflectable	•		•			•	13-1671-45
Finger retractor, deflectable		•		•	•		13-1672
Finger retractor, deflectable		•		•		•	13-1672-45

## Finger Retractors, Straight Fan, Deflectable



	Diameter		Type		Item no.
	Ø 5 mm	Ø 10 mm	3-Finger	5-Finger	
<b>Finger</b> retractor, straight fan, deflectable, 330 mm	•		•		<b>13-1671S</b>
<b>Finger</b> retractor, straight fan, deflectable, 330 mm		•		•	<b>13-1672S</b>

## Esophageal Retractors



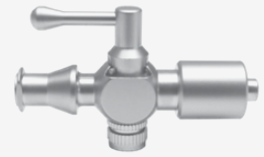
	Diameter		Total length		Item no.
	Ø 5 mm	Ø 10 mm	330 mm	450 mm	
<b>Esophageal retractor</b> for application of gastric band	•		•		<b>13-1668</b>
<b>Esophageal retractor</b> for application of gastric band		•	•		<b>13-1668-10</b>
<b>Esophageal retractor</b> for application of gastric band		•		•	<b>13-1668-10-45</b>

## Hourlay Finger Retractor



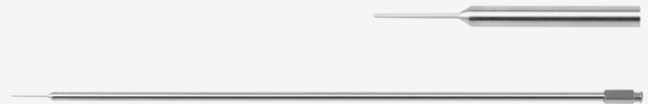
	Item no.
<b>Hourlay finger retractor</b> , Ø 10 mm , 330 mm	<b>13-1669</b>

## Connector Luer-Lock / Tube



	Item no.
Connector luer-lock/tube with stopcock	13-1355LLVLV

## LL Injection Needles



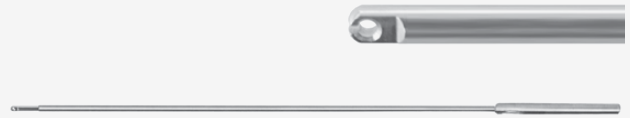
	Diameter		Length			Item no.
	Ø 2.8 mm	Ø 5 mm	260 mm	330 mm	450 mm	
Injection needle (Ø 0.9 mm / 19 gauge) with Luer Lock		•		•		13-1619-19G
Injection needle (Ø 0.9 mm / 19 gauge) with Luer Lock		•			•	13-1619-45-19G
Injection needle (Ø 1.2 mm / 18 gauge) with Luer Lock	•			•		13-1619-3
Injection needle (Ø 1.5 mm / 16 gauge) with Luer Lock		•	•			13-1619-26
Injection needle (Ø 1.5 mm / 16 gauge) with Luer Lock		•		•		13-1619
Injection needle (Ø 1.5 mm / 16 gauge) with Luer Lock		•			•	13-1619-45

## Cholangiogram Instrument



	Item no.
Cholangiogram forceps with ratchet, Ø 5 mm, 330 mm	11-1249

## Knot Pushers



	Type		Total length		Item no.
	open eyelet	slot	330 mm	450 mm	
Knot pusher, Ø 5 mm	•		•		13-1617
Knot pusher, Ø 5 mm	•			•	13-1617-45
Knot pusher, Ø 5 mm		•	•		13-1617SL
Knot pusher, Ø 5 mm		•		•	13-1617SL-45

## Palpation Probes



	Diameter		Length		Item no.
	Ø 3 mm	Ø 5 mm	330 mm	450 mm	
Graduated palpation probe	•		•		10-1110-3
Graduated palpation probe		•	•		10-1110
Graduated palpation probe		•		•	10-1110-45

## Anvil Grasping Forceps



	Length		Item no.
	330 mm	450 mm	
Anvil grasper, Ø 10 mm	•		13-1599A
Anvil grasper, Ø 10 mm		•	13-1599A-45



# Ring Applicators

Incl. cone(13-1618-200) and loading device(13-1618-300)



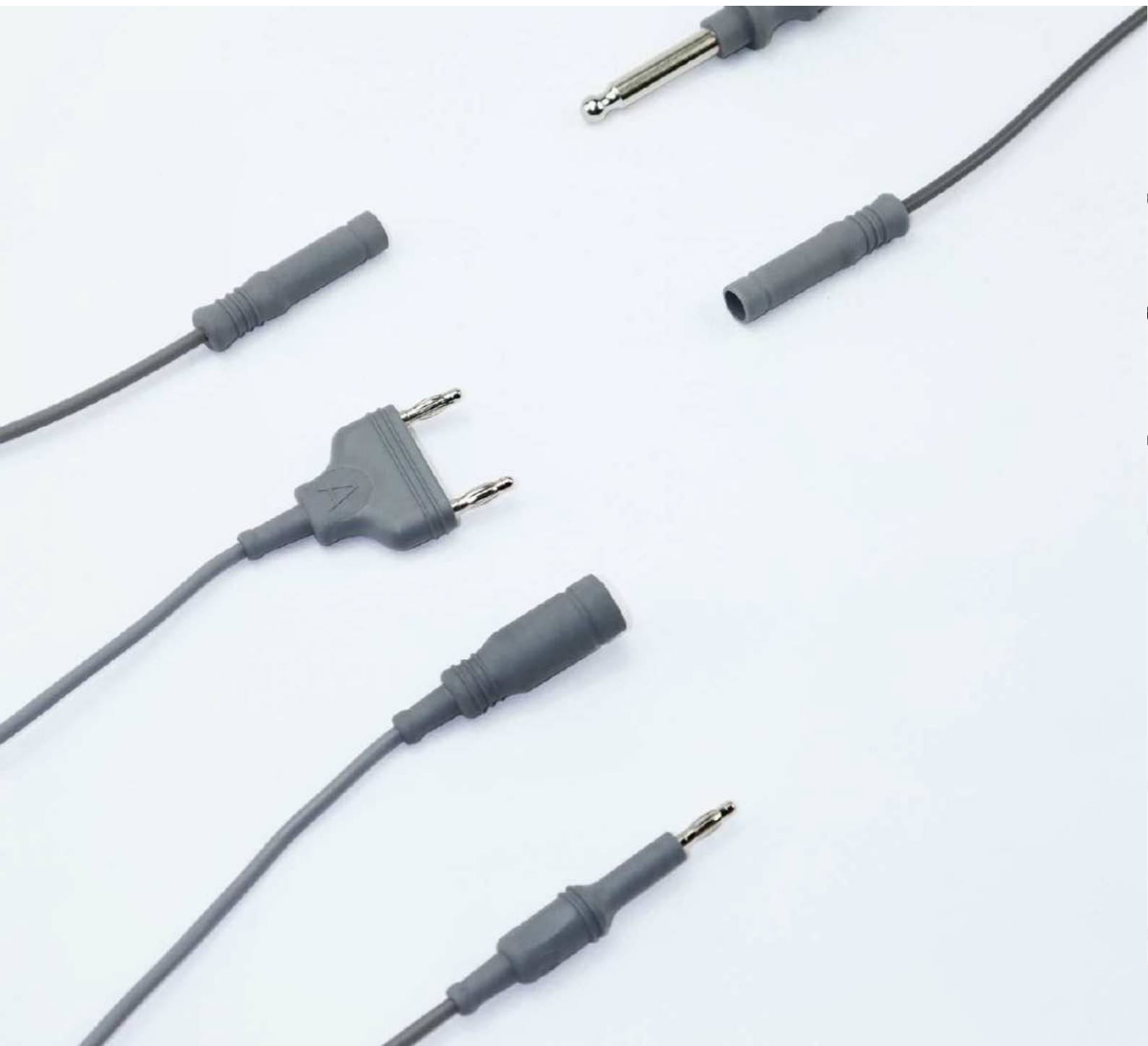
	Diameter		Length		For use with			Item no.
	Ø 6 mm	Ø 6.5 mm	330 mm	400 mm	instrument bridge	scope	trocac sleeve	
Ring applicator	•			•	•			13-1618
Ring applicator	•		•			•		13-16180V
Ring applicator		•	•				•	13-1618TR

# Connecting Cables

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# Monopolar Cables

	Generator side					Item no.
	Ø 4 mm Ackermann / Erbe T <sup>1</sup> / Martin <sup>1</sup> / Berchthold <sup>1</sup>		Ø 5 mm Erbe ACC <sup>1</sup> / ICC-VIO <sup>1</sup>	Ø 8 mm Bovie <sup>1</sup> / Valleylab <sup>1</sup> / Conmed <sup>1</sup>	Ø 4 mm ACM <sup>1</sup> / Martin <sup>1</sup> / Berchthold <sup>1</sup> / Aesculap <sup>1</sup>	
<b>Ø 4 mm instrument side, round plug</b>  for monopolar lap instruments and electrodes	3 m length	5 m length	3 m length	3 m length	3 m length	11-1260
	•					11-1260-5
		•				11-1261
			•			11-1262
				•	•	11-1263

# Bipolar Cables

	Generator side				Item no.
	2-Banana		Storz <sup>1</sup> / Erbe <sup>1</sup>	Martin <sup>1</sup> / Berchthold <sup>1</sup>	
<b>EU Flat plug instrument side, square plug</b>  for premium bipolar instruments and electrodes	3 m length	5 m length	3 m length	3 m length	13-1641
	•				13-1641-5
		•			13-1643
			•		13-1644
<b>MIC plug instrument side, round plug</b>  for standard bipolar instruments	3 m length	5 m length	3 m length	3 m length	13-1641BPW
	•				13-1641-5BPW
		•			13-1643BPW
			•		13-1644BPW



# Lap Containers

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## 1/1 Lap Instrument Container with Rack and Mat



		Item no.
<b>1/1 Container</b> with lap instrument rack and silicone mat, 580 x 280 x 260 mm		<b>15-1694</b>
includes	1/1 Container, bottom non-perforated, silver lid, 580 x 280 x 260 mm	15-1694L
and	Container inlay for endoscopes, 420 x 250 x 45 mm	15-1694I
and	Container silicone mat, blue, 520 x 230 mm	15-1694SI

## 1/1 Lap Instrument Container, Small



	Item no.
<b>1/1 Container</b> , bottom non-perforated, silver lid, 580 x 280 x 100 mm	<b>15-1694S</b>

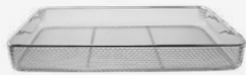



## 1/1 Lap Instrument Container, Large



	Item no.
<b>1/1 Container</b> , bottom non-perforated, silver lid, 580 x 280 x 260 mm	<b>15-1694L</b>



## Accessories for Lap and Endoscope Containers

	For container			Item no.	
	1/1	3/4	1/2		
<b>Container wire basket</b> , 535 x 250 x 70mm	•			<b>15-1694B</b>	
<b>Container wire basket</b> with instrument rack for up to 5 x Ø 5 mm and up to 4 x Ø 10 mm instruments, 535 x 250 x 70 mm	•			<b>15-1694BR</b>	
<b>Paper filters</b> , UOM 100 pcs.	•	•	•	<b>15-1694F</b>	
<b>Filter retainer</b>	•	•	•	<b>15-1694FR</b>	
<b>Container instrument rack</b> for up to 10 x Ø 5 mm / Ø 10 mm instruments, 515 x 250 x 165 mm	•			<b>15-1694I</b>	
<b>Additional instrument holder</b> for up 10 x Ø 5 mm / Ø 10 mm instruments, use with 15-1694I	•			<b>15-1694I-100</b>	
<b>Container silicone mat</b> , blue, 520 x 230 mm	•			<b>15-1694SI</b>	

## Endoscope Container with Silicone Mounting



	Dimensions		Item no.
	470 x 80 x 74 mm	270 x 70 x 65 mm	
<b>Endoscope container</b> , perforated, with silicone mounting	•		<b>15-1691</b>
<b>Endoscope container</b> , perforated, with silicone mounting		•	<b>15-1692</b>

## Endoscope Wire Basket with Lid and Scope Fixation



	Dimensions		Item no.
Endoscope wire basket with lid and scope fixation	460 x 80 x 52 mm	670 x 80 x 52 mm	15-1697
Endoscope wire basket with lid and scope fixation			15-1697-100

## Plastic Endoscope Sterilization Case



	Item no.
Plastic sterilization case for endoscopes, 470 x 100 x 70 mm	15-1695

## Accessories for Endoscope Plastic Sterilization Case

	Item no.
Safety seals for 15-1695, UOM 1.000 pcs.	15-1695-100
Sterilization seals for 15-1695, UOM 1.000 pcs.	15-1695-200
Permanent filter set for 15-1695	15-1695F



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