



# Miniature Laparoscopy

Access, Instrumentation & Sets

## 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.

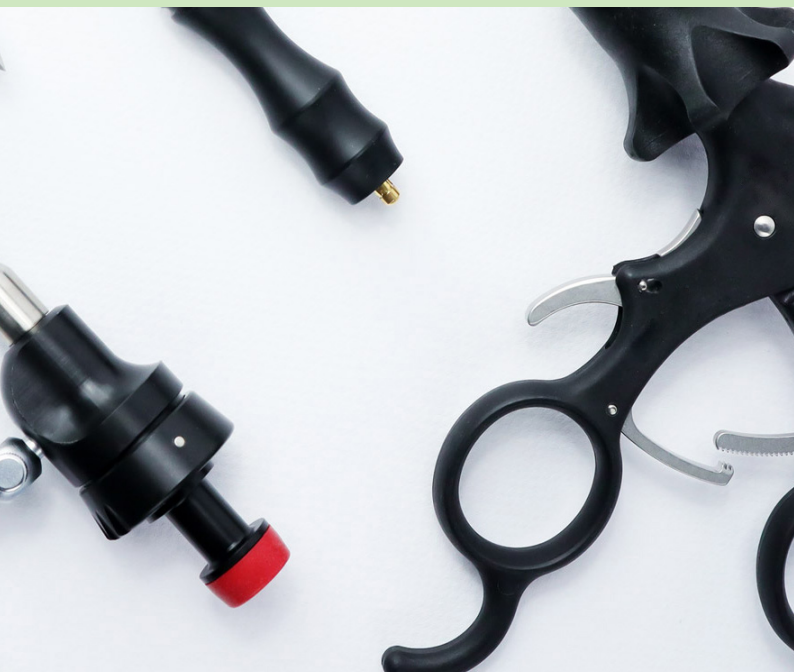
# Ackermann

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

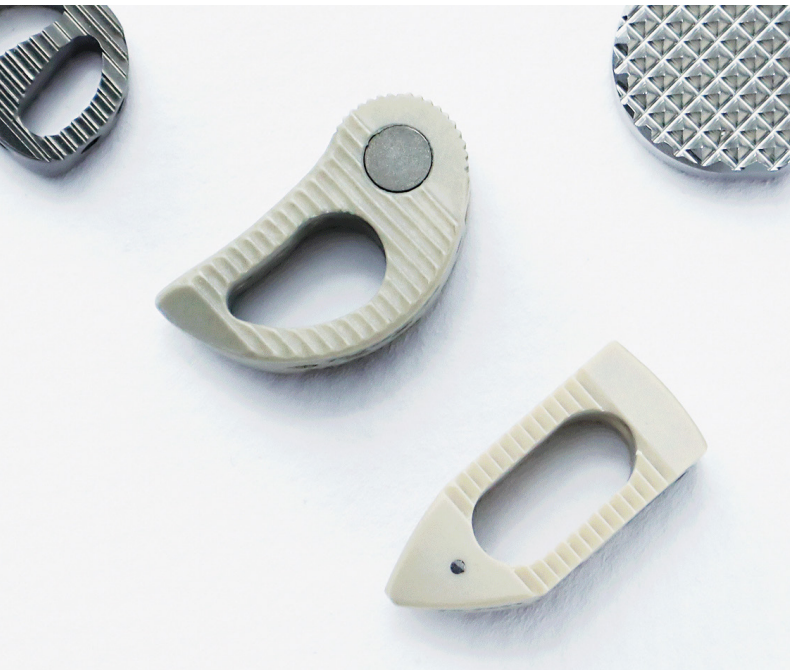
Surgical Instruments, Units, Implants, Optics

+ 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



# Table of Contents

## Product Range at a Glance



### Miniature Laparoscopy Sets

Pediatric Lap Set	p. 6
Miniature Lap Set	p. 8

### Access Instrumentation

Miniature Trocars	p. 10
Miniature Obturators	p. 12

### Monopolar Electrodes

Miniature Monopolar Electrodes	p. 14
--------------------------------	-------

### Suction/Irrigation Accessories

Mini Pistol Handle Suction/Irrigation Line	p. 16
Mini Interchangeable Suction/Irrigation Line	p. 16

### Mini Laparoscopic Monopolar Instrument Lines

#### Reusable

Miniature XPress Lock™ Handles	p. 18
Miniature Ceramix Cut™ Scissors	p. 20
Inserts for Miniature XPress Lock™	p. 22

#### Hybrid

Miniature Future Lap™ Handles & Inserts	p. 34
---	-------

### Mini Laparoscopic Bipolar Instrument Line

Miniature Premium Bipolar Instrument Line	p. 38
---	-------

### Miniature Speciality Instruments

Miniature Needleholders	p. 42
Miniature LL Injection Needle	p. 45
Miniature Knot Pusher	p. 45
Miniature LL Palpation Probe	p. 45
Miniature Verres Needle	p. 45



# Pediatric Lap Set

Ordering Information and Recommendations

1x 4k UHD Laparoscope, 0°, Ø 5 mm, 330 mm	# 11-1120UHD
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
1x Plain silicone valve trocar, demount., carbon fiber, Ø 5.5 mm	# 10-1115
1x Conical tip obturator, Ø 5.5 mm	# 10-1035
4x Miniature silicone valve trocar, Ø 3 mm, 70 mm	# 23-3086
4x Miniature triangular tip obturator for 23-3086, Ø 3 mm	# 23-3021
1x Verres needle, Ø 2 mm, 100 mm	# 10-1100
1x Miniature Metzenbaum scissors, Ø 2.9 mm, 200 mm (insert)	# 23-3000XPI-20
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
2x Miniature grasping forceps, Ø 2.9 mm, 200 mm (insert)	# 23-3015XPI-20
2x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Miniature bowel grasping forceps, Ø 2.9 mm, 200 mm (insert)	# 23-3082XPI-20
1x XPress Lock™ handle with french ratchet	# 13-1369XP
1x Miniature hook scissors, Ø 2.9 mm, 200 mm (insert)	# 23-3001XPI-20
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Miniature Kelly grasping forceps, Ø 2.9 mm, 200 mm (insert)	# 23-3020XPI-20
1x XPress Lock™ handle w/o ratchet	# 13-1367XP



1x Miniature Pylorus grasping forceps, Ø 2.9 mm, 200 mm (insert)	# 23-3092XPI-20
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Mini bipolar Maryland grasping forceps, Ø 3 mm, 290 mm (insert)	# 23-3025BP
1x Sheath for mini bipolar detachable instruments, Ø 3 mm, 290 mm	# 23-3091
1x Handle for mini bipolar detachable instruments	# 23-3090
1x Mini bipolar fenestrated grasping forceps, Ø 3 mm, 290 mm (insert)	# 23-3082BP
1x Sheath for mini bipolar detachable instruments, Ø 3 mm, 290 mm	# 23-3091
1x Handle for mini bipolar detachable instruments	# 23-3090
1x Mini bipolar Metzenbaum scissors, Ø 3 mm, 290 mm (insert)	# 23-3000BP
1x Sheath for mini bipolar detachable instruments, Ø 3 mm, 290 mm	# 23-3091
1x Handle for mini bipolar detachable instruments	# 23-3090
1x Modular handle for 3 mm / 5 mm / 10 mm suction-irrigation tube	# 11-1236
1x Standard tube, Ø 3 mm	# 11-1237-700
1x L-Hook electrode, monopolar, Ø 3 mm, 200 mm	# 23-3070-20
1x Axial needleholder, right curved jaws, angled handle, Ø 3 mm	# 23-3027P-20
1x Axial needleholder, left curved jaws, angled handle, Ø 3 mm	# 23-3028P-20
1x Monopolar cable, Erbe ACC <sup>1</sup> / ICC-VIO <sup>1</sup> , 3 m	# 11-1261
1x Bipolar cable, EU flat plug, 2-banana , 3 m	# 13-1641

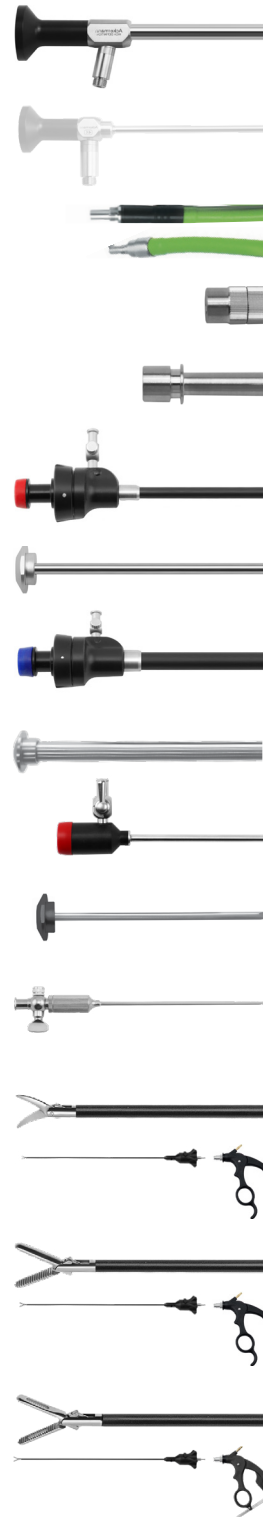


# Miniature Lap Set




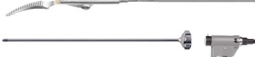





Ordering Information and Recommendations

OPTIONAL

1x 4k UHD Laparoscope, 30°, Ø 10 mm, 330 mm	# 11-1135UHD
1x 4k UHD Laparoscope, 30°, Ø 5 mm, 330 mm	# 11-1125UHD
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
1x Plain silicone valve trocar, demount., carbon fiber, Ø 5.5 mm	# 10-1115
1x Conical tip obturator, Ø 5.5 mm	# 10-1035
1x Plain silicone valve trocar, demount., carbon fiber, Ø 11 mm	# 10-1116
1x Pyramidal / triangular tip obturator, Ø 11 mm	# 10-1044
3x Miniature silicone valve trocar, Ø 3 mm, 70 mm	# 23-3086
3x Miniature triangular tip obturator for 23-3086, Ø 3 mm	# 23-3021
1x Verres needle, Ø 2 mm, 120 mm	# 10-1105
1x Miniature Metzenbaum scissors, Ø 2.9 mm, 360 mm (insert)	# 23-3000XPI
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Miniature grasping forceps, Ø 2.9 mm, 360 mm (insert)	# 23-3015XPI
1x XPress Lock™ handle w/o ratchet	# 13-1367XP
1x Miniature bowel grasping forceps, Ø 2.9 mm, 360 mm (insert)	# 23-3082XPI
1x XPress Lock™ handle with french ratchet	# 13-1369XP



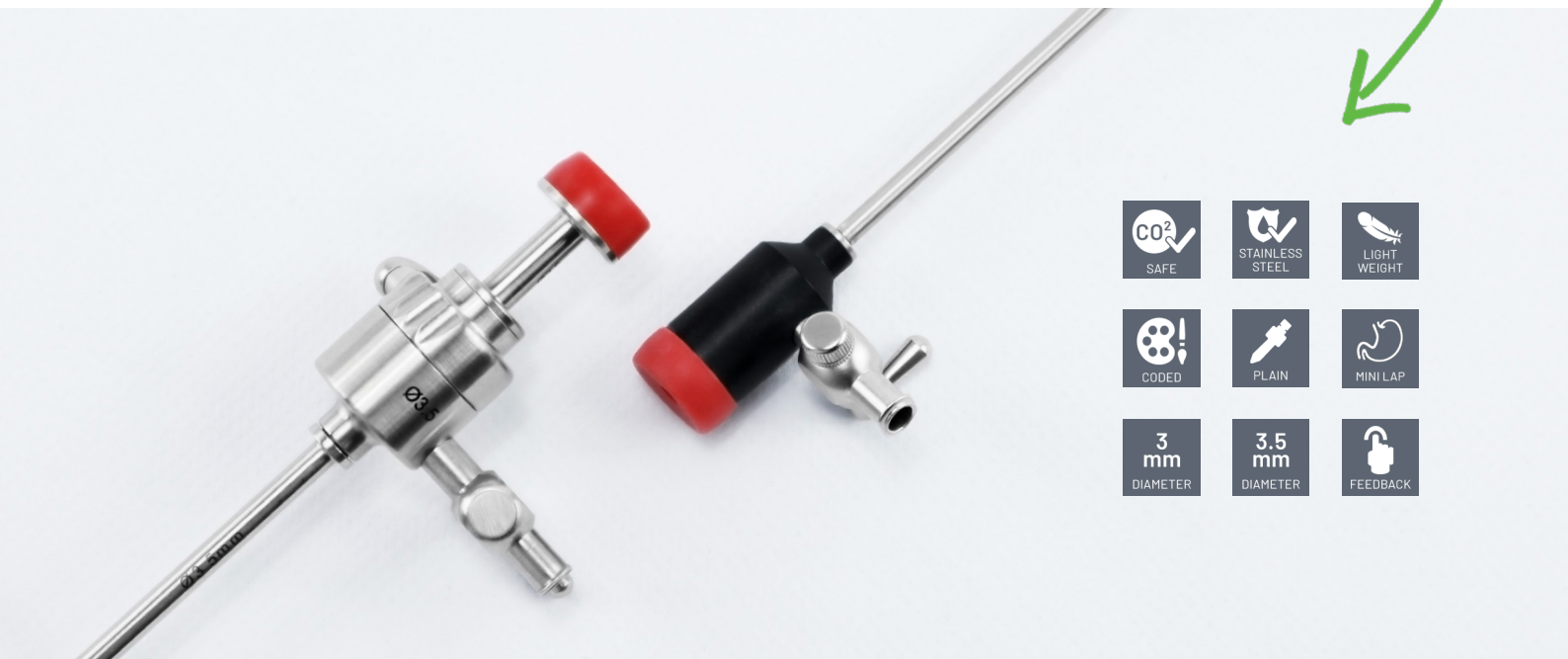


1x Miniature hook scissors, Ø 2.9 mm, 360 mm (insert)	# 23-3001XPI	
1x XPress Lock™ handle w/o ratchet	# 13-1367XP	
1x Miniature Kelly grasping forceps, Ø 2.9 mm, 360 mm (insert)	# 23-3020XPI	
1x XPress Lock™ handle w/o ratchet	# 13-1367XP	
1x Miniature Pylorus grasping forceps, Ø 2.9 mm, 360 mm (insert)	# 23-3092XPI	
1x XPress Lock™ handle w/o ratchet	# 13-1367XP	
1x Mini bipolar Maryland grasping forceps, Ø 3 mm, 290 mm (insert)	# 23-3025BP	
1x Sheath for mini bipolar detachable instruments, Ø 3 mm, 290 mm	# 23-3091	
1x Handle for mini bipolar detachable instruments	# 23-3090	
1x Mini bipolar fenestrated grasping forceps, Ø 3 mm, 290 mm (insert)	# 23-3082BP	
1x Sheath for mini bipolar detachable instruments, Ø 3 mm, 290 mm	# 23-3091	
1x Handle for mini bipolar detachable instruments	# 23-3090	
1x Mini bipolar Metzenbaum scissors, Ø 3 mm, 290 mm (insert)	# 23-3000BP	
1x Sheath for mini bipolar detachable instruments, Ø 3 mm, 290 mm	# 23-3091	
1x Handle for mini bipolar detachable instruments	# 23-3090	
1x Injection needle Ø 2.8 mm, 330 mm	# 13-1619-3	
1x Modular handle for 3 mm / 5 mm / 10 mm suction-irrigation tube	# 11-1236	
1x Standard tube, Ø 3 mm	# 11-1237-700	
1x L-Hook electrode, monopolar, Ø 3 mm, 330 mm	# 23-3070	
1x Axial needleholder, right curved jaws, angled handle, Ø 3 mm	# 23-3027P	
1x Axial needleholder, left curved jaws, angled handle, Ø 3 mm	# 23-3028P	
1x Monopolar cable, Erbe ACC <sup>1</sup> / ICC-VIO <sup>1</sup> , 3 m	# 11-1261	
1x Bipolar cable, EU flat plug, 2-banana, 3 m	# 13-1641	

# Miniature Trocars

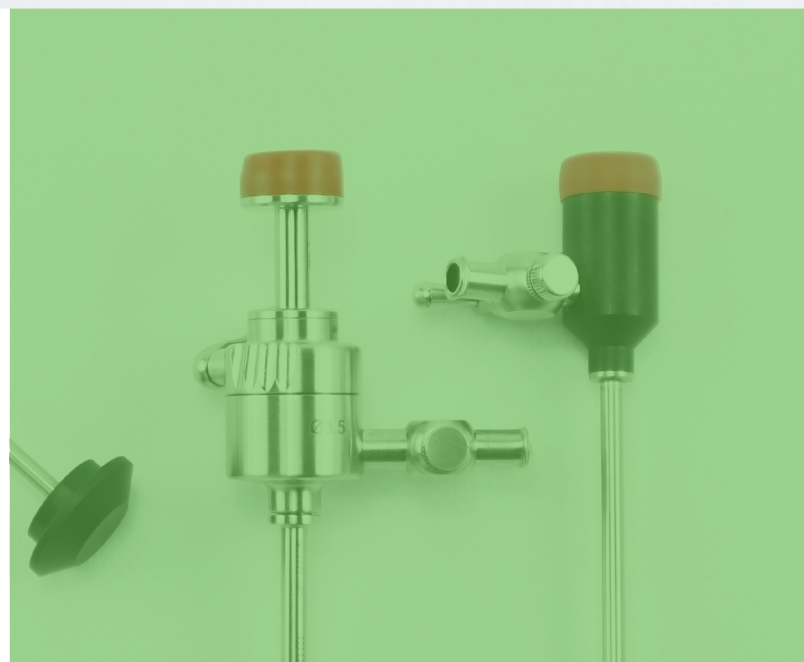
## Key Features

- 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 obturators: 23-3021 / 23-3021BL	●	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 / 23-3022BL	●	23-3084

# Miniature Obturators

## Key Features

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



3  
mm  
DIAMETER

LIGHT  
WEIGHT

TRIANGULAR

PREVENTS  
INJURIES

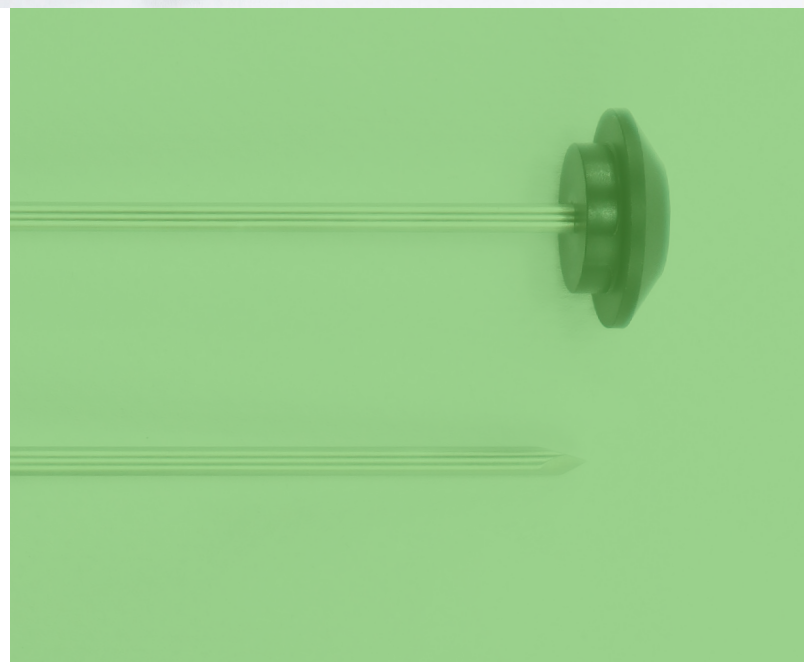
STAINLESS  
STEEL

BLUNT

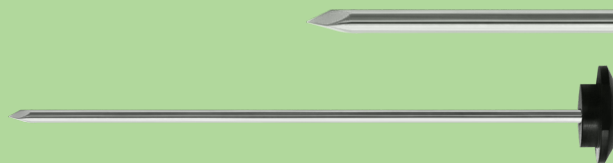
MINI LAP

## ... more Features

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

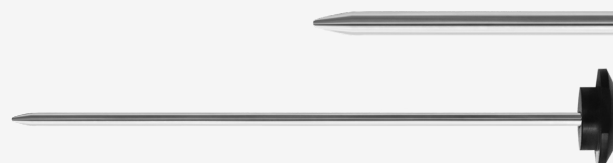


## Miniature Triangular Obturators



	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

## Miniature Conical / Blunt Tip Obturators



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

# Miniature Monopolar Electrodes

## Key Features

- **Various** tip patterns options and two working lengths
- **Extended and durable** insulation
- **Ø 3 mm** for pediatric use



- 4 PATTERNS
- LIGHT WEIGHT
- VARIOUS LENGTHS
- MINI LAP
- 3 mm DIAMETER
- REUSABLE
- CLEANABLE

## Miniature Spatula Electrodes



	Length		Item no.
	200 mm	330 mm	
Miniature spatula electrode, monopolar, Ø 3 mm	•		23-3065-20
Miniature spatula electrode, monopolar, Ø 3 mm		•	23-3065

## Miniature Button Electrodes



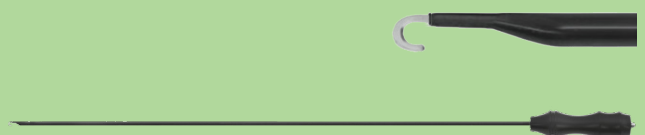
	Length		Item no.
	200 mm	330 mm	
Miniature button electrode, monopolar, Ø 3 mm	•		23-3066-20
Miniature button electrode, monopolar, Ø 3 mm		•	23-3066

## Miniature L-Hook Electrodes



	Length		Item no.
	200 mm	330 mm	
Miniature L-Hook electrode, monopolar, Ø 3 mm	•		23-3070-20
Miniature L-Hook electrode, monopolar, Ø 3 mm		•	23-3070

## Miniature J-Hook Electrodes



	Length		Item no.
	200 mm	330 mm	
Miniature J-Hook electrode, monopolar, Ø 3 mm	•		23-3075-20
Miniature J-Hook electrode, monopolar, Ø 3 mm		•	23-3075

# Miniature Suction/Irrigation Systems

## 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
- **Easy** assembly and disassembly
- **Ø 3 mm** suction tubing for pediatric use



## ... more Features

- Enlarged suction channel
- Comfortable operation due to swivel movement of sliding valve on pistol handle
- Tube length of 330 mm
- Fully detachable





## Pistol Handle

For Use with 11-1278-3



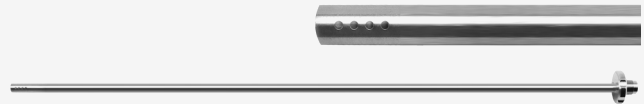
**Pistol** handle

Item no.

11-1276

## Standard Tube

For Use with 11-1276



**Standard** tube with drillings, Ø 3 mm, 330 mm

Item no.

11-1278-3

## Modular Handle

For Use with 11-1237-700



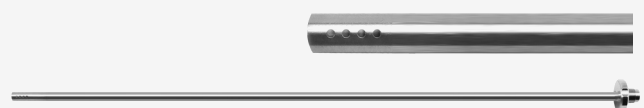
**Modular** handle for Ø 3 mm / Ø 5 mm / Ø 10 mm suction-irrigation tubes

Item no.

11-1236

## Standard Tube

For Use with 11-1236



**Standard** tube, 8 drillings, Ø 3 mm, 330 mm

Item no.

11-1237-700

# Miniature XPress Lock™ Line

## Key Features

- Reliable **quick-lock mechanism** for one-click assembly and disassembly
- Two-piece instrument line for **increased stability and durability** fully compatible with all **XPress Lock™ handles**
- Industry-leading **small diameter of only 2.9 mm** for reduced trauma
- **Complete array** of instrument patterns and jaw designs, including **Mini Ceramix Cut™** coated scissors



## ... more Features

- Integrated flush port for fast and convenient reprocessing
- Available in working lengths of 200 and 360 mm
- Fully autoclavable
- 360° rotatable with audible and tactile feedback



# 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



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

# XPress Lock™ Handle with French Ratchet

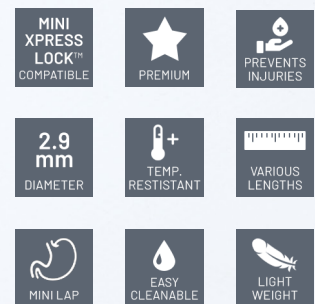


XPress Lock™ handle with french ratchet, black	<b>Item no.</b> 13-1369XP
--	------------------------------

# Miniature Ceramix Cut™ Scissors

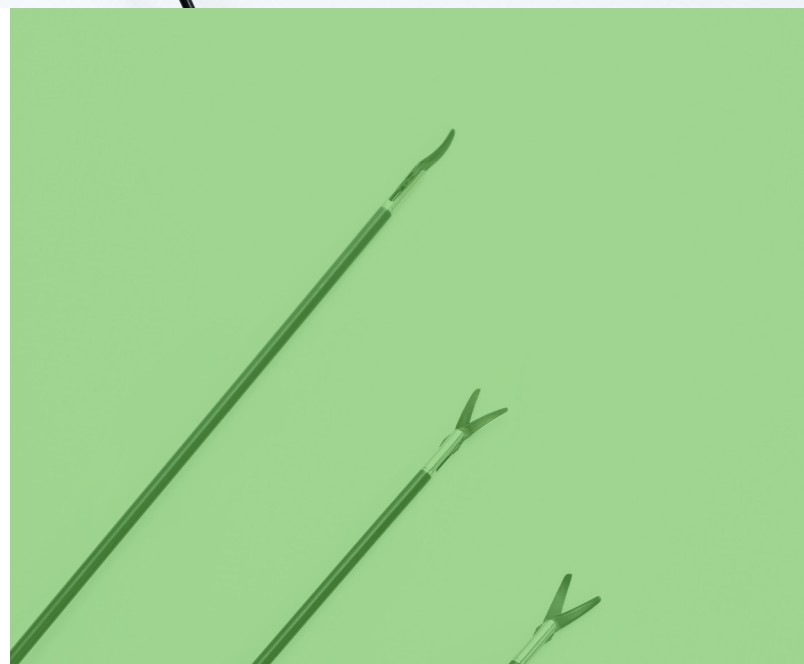
## Key Features

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



## ... 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



## Miniature Metzenbaum Scissors, Ceramix Cut™

Straight, double-action, Ø 2.9 mm



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3005CI-20
•		•	23-3005CI

Recommended use with **handle w/o ratchet**

## Miniature Metzenbaum Scissors, Ceramix Cut™

Serrated, curved, double-action, Ø 2.9 mm



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3010CI-20
•		•	23-3010CI

Recommended use with **handle w/o ratchet**

## Miniature Metzenbaum Scissors, Ceramix Cut™

Curved, double-action, Ø 2.9 mm



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3000CI-20
•		•	23-3000CI

Recommended use with **handle w/o ratchet**

## Miniature Metzenbaum Scissors

Straight, double-action, Ø 2.9 mm



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™			
•	•		23-3005XPI-20
•		•	23-3005XPI

Recommended use with **handle w/o ratchet**

## Miniature Metzenbaum Scissors

Serrated, curved, double-action, Ø 2.9 mm

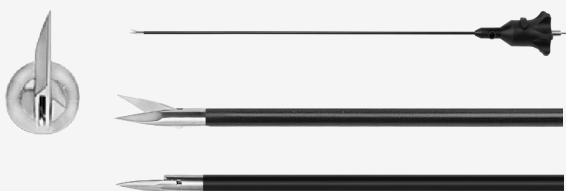


Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™			
•	•		23-3010XPI-20
•		•	23-3010XPI

Recommended use with **handle w/o ratchet**

## Miniature Scissors

Pointed, single-action, Ø 2.9 mm

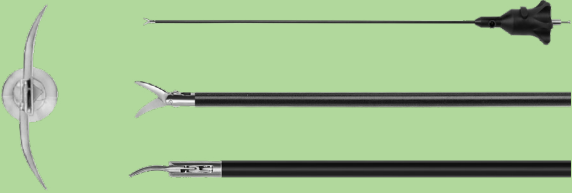


Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™			
•	•		23-3007XPI-20
•		•	23-3007XPI

Recommended use with **handle w/o ratchet**

## Miniature Metzenbaum Scissors

Curved, double-action, Ø 2.9 mm



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™			
•	•		23-3000XPI-20
•		•	23-3000XPI

Recommended use with **handle w/o ratchet**

## Miniature Hook Scissors

Single-action, Ø 2.9 mm



Line		Length		Item no.
XPress Lock™	System CS™	200 mm	360 mm	
•		•		23-3001XPI-20
•			•	23-3001XPI

Recommended use with **handle w/o ratchet**

## Miniature Bowel Grasping Forceps

Fenestrated, double-action, Ø 2.9 mm



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™			
•	•		23-3082XPI-20
•		•	23-3082XPI

Recommended use with **handle with ratchet**

## Miniature Grasping Forceps

Fenestrated, single-action,  $\varnothing 2.9\text{ mm}$



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3089XPI-20
	•	•	23-3089XPI

Recommended use with **handle with ratchet**

## Miniature Pylorus Grasping Forceps

Fenestrated, in- and outside serrated, double-action,  $\varnothing 2.9\text{ mm}$



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3092XPI-20
	•	•	23-3092XPI

Recommended use with **handle with ratchet**

## Miniature Johan Grasping Forceps

Large fenestration, single-action,  $\varnothing 2.9\text{ mm}$



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3088XPI-20
	•	•	23-3088XPI

Recommended use with **handle with ratchet**



# Miniature Croce Olmi Grasping Forceps

Single-action, Ø 2.9 mm



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3017XPI-20
	•	•	23-3017XPI

Recommended use with **handle with ratchet**

# Miniature Fundus Grasping Forceps

Double-action, Ø 2.9 mm



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3042XPI-20
	•	•	23-3042XPI

Recommended use with **handle with ratchet**

# Miniature Grasping Forceps

Double-action, Ø 2.9 mm



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3015XPI-20
	•	•	23-3015XPI

Recommended use with **handle with ratchet**

## Miniature Atraumatic Dissector

Slightly conical, double-action,  $\varnothing 2.9\text{ mm}$



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3030XPI-20
	•	•	23-3030XPI

Recommended use with **handle w/o ratchet**

## Miniature Dissector

Conical, cross-serrated, double-action,  $\varnothing 2.9\text{ mm}$



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3032XPI-20
	•	•	23-3032XPI

Recommended use with **handle w/o ratchet**

## Miniature Duckbill Grasping Forceps

Double-action,  $\varnothing 2.9\text{ mm}$



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3045XPI-20
	•	•	23-3045XPI

Recommended use with **handle w/o ratchet**

# Miniature Rat Teeth Grasping Forceps

1x2 jaws, double-action, Ø 2.9 mm



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3038XPI-20
	•	•	23-3038XPI

Recommended use with **handle w/o ratchet**

# Miniature Rat Teeth Grasping Forceps

1x2 jaws, single-action, Ø 2.9 mm



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3039XPI-20
	•	•	23-3039XPI

Recommended use with **handle w/o ratchet**

# Miniature Maryland Grasping Forceps

Double-action, Ø 2.9 mm



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3025XPI-20
	•	•	23-3025XPI

Recommended use with **handle w/o ratchet**

## Miniature Kelly Grasping Forceps

Double-action, long, 10 mm jaw length,  $\varnothing 2.9$  mm



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™			
•	•		23-3019XPI-20
•		•	23-3019XPI

Recommended use with **handle w/o ratchet**

## Miniature Kelly Grasping Forceps

Double-action, short, 8 mm jaw length,  $\varnothing 2.9$  mm



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™			
•	•		23-3020XPI-20
•		•	23-3020XPI

Recommended use with **handle w/o ratchet**

## Miniature Cobra Grasping Forceps

Heavily serrated, double, action,  $\varnothing 2.9$  mm



Line	Length		Item no.
	330 mm	450 mm	
XPress Lock™			
•	•		23-3040XPI-20
•		•	23-3040XPI

Recommended use with **handle w/o ratchet**

## Miniature Allis Grasping Forceps

Single-action, Ø 2.9 mm



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3041XPI-20
	•	•	23-3041XPI

Recommended use with **handle w/o ratchet**

## Miniature Grasping Forceps

Heavily serrated, double-action, Ø 2.9 mm



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3035XPI-20
	•	•	23-3035XPI

Recommended use with **handle w/o ratchet**

## Miniature Alligator Grasping Forceps

Serrated, double-action, Ø 2.9 mm



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3055XPI-20
	•	•	23-3055XPI

Recommended use with **handle w/o ratchet**

## Miniature Alligator Grasping Forceps

Serrated, single-action,  $\varnothing 2.9\text{ mm}$

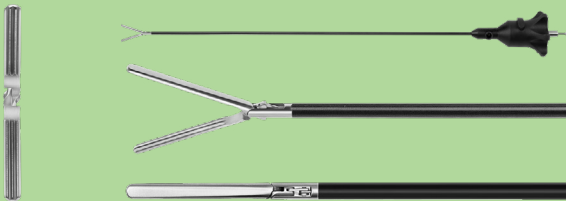


Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™			
•	•		23-3056XPI-20
•		•	23-3056XPI

Recommended use with **handle w/o ratchet**

## Miniature De Bakey Grasping Forceps

Double-action, single-serration,  $\varnothing 2.9\text{ mm}$



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™			
•	•		23-3094XPI-20
•		•	23-3094XPI

Recommended use with **handle w/o ratchet**

## Miniature Babcock Grasping Forceps

Double-action,  $\varnothing 2.9\text{ mm}$

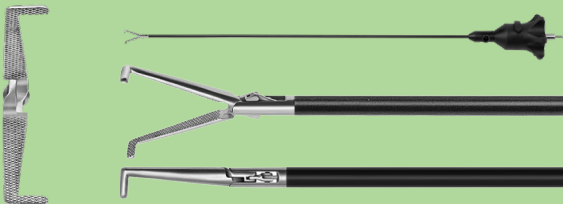


Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™			
•	•		23-3093XPI-20
•		•	23-3093XPI

Recommended use with **handle w/o ratchet**

# Miniature Mixer Clamp

90° angled, double-action, Ø 2.9 mm

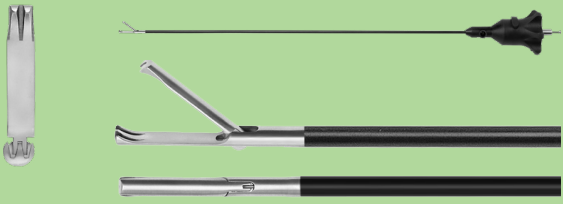


Line	Length		Item no.
XPress Lock™	200 mm	360 mm	
•	•		23-3023XPI-20
•		•	23-3023XPI

Recommended use with **handle w/o ratchet**

# Miniature Claw Forceps

2x3 traumatic jaws, single-action, Ø 2.9 mm



Line	Length		Item no.
XPress Lock™	200 mm	360 mm	
•	•		23-3037XPI-20
•		•	23-3037XPI

Recommended use with **handle w/o ratchet**

# Miniature Punch

Single-action, Ø 2.9 mm



Line	Length		Item no.
XPress Lock™	200 mm	360 mm	
•	•		23-3002XPI-20
•		•	23-3002XPI

Recommended use with **handle w/o ratchet**

## Miniature Needleholder

TC inserts, straight, single-action,  $\varnothing 2.9\text{ mm}$



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3026XPI-20
	•	•	23-3026XPI

Recommended use with **handle w/o ratchet**

## Miniature Needleholder

Right-angled, single-action,  $\varnothing 2.9\text{ mm}$



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3027XPI-20
	•	•	23-3027XPI

Recommended use with **handle w/o ratchet**

## Miniature Needleholder

Left-angled, single-action,  $\varnothing 3\text{ mm}$



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3028XPI-20
	•	•	23-3028XPI

Recommended use with **handle w/o ratchet**



## Miniature Biopsy Spoon

Double-action, Ø 2.9 mm



Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3050XPI-20
•		•	23-3050XPI

Recommended use with **handle w/o ratchet**

## Miniature Biopsy Spoon

Single-action, Ø 2.9 mm

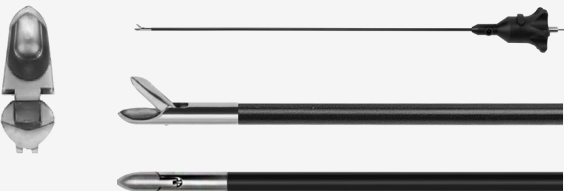


Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3051XPI-20
•		•	23-3051XPI

Recommended use with **handle w/o ratchet**

## Miniature Blakesley Dissecting & Biopsy Forceps

Fenestrated, single-action, Ø 2.9 mm



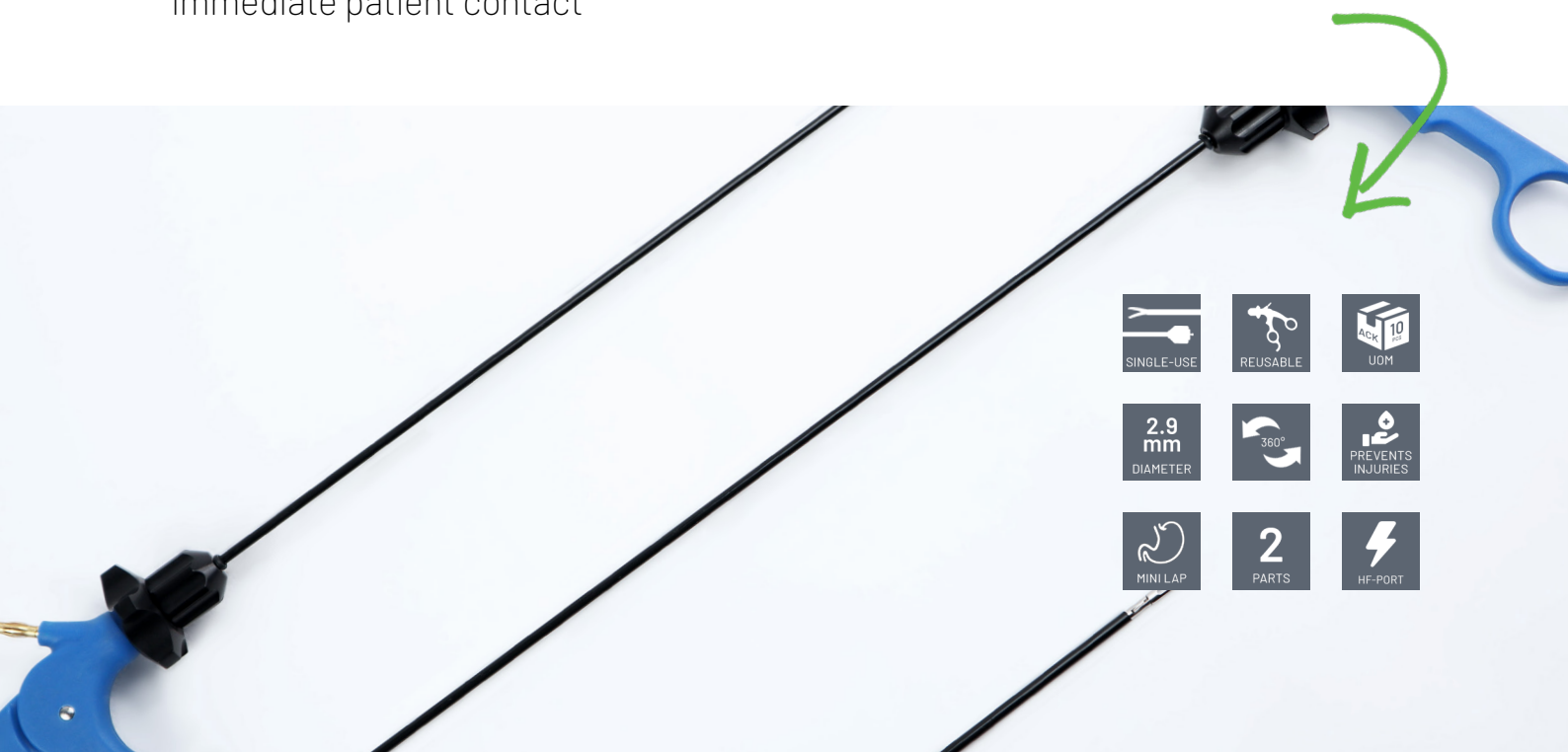
Line	Length		Item no.
	200 mm	360 mm	
XPress Lock™	•	•	23-3053XPI-20
•		•	23-3053XPI

Recommended use with **handle w/o ratchet**

# Miniature Future Lap™ Hybrids

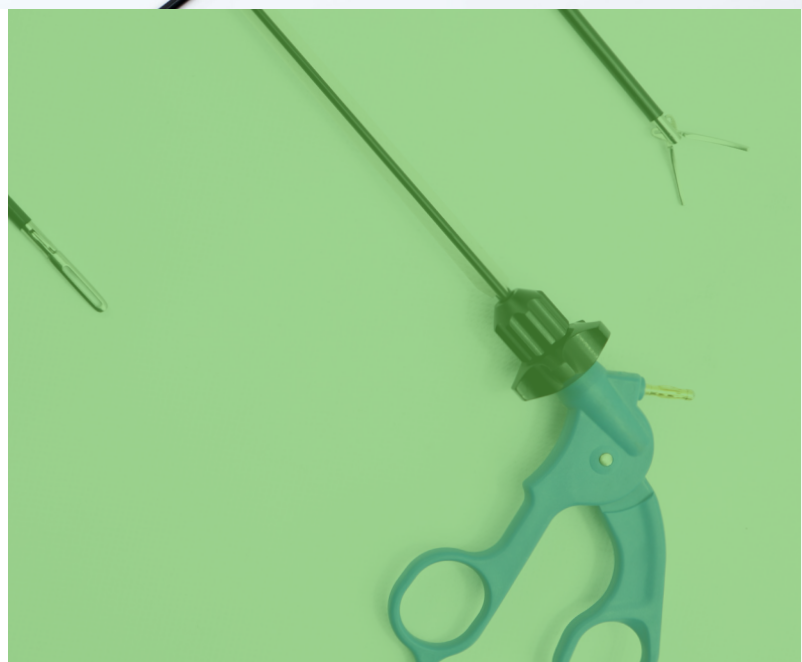
## Key Features

- Combination of a sterile, **single-use sheath/tip** assembly and a fully **reusable handle** in Ø 2.9 mm for Miniature Laparoscopy procedures
- 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

- Length of 330
- 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



STERILE

## Miniature Metzenbaum Scissors, Future Lap™ Insert

For Use with System CS™ Handles



	<b>Item no.</b>
Miniature single-use <b>Metzenbaum scissors</b> , Future Lap™, curved, Ø 2.9 mm, 330 mm, UOM 10 pcs.	<b>23-300DDI</b>

STERILE

## Miniature Maryland Grasper, Future Lap™ Insert

For Use with System CS™ Handles



	<b>Item no.</b>
Miniature single-use <b>Maryland grasping forceps</b> , Future Lap™, Ø 2.9 mm, 330 mm, UOM 10 pcs.	<b>23-3025DDI</b>

STERILE

## Mini Fenestrated Grasping Forceps, Future Lap™ Insert

For Use with System CS™ Handles



	<b>Item no.</b>
Mini single-use <b>fenestr. grasp. forceps</b> , Future Lap™, flat jaws, d.-act., Ø 2.9 mm, 330 mm, UOM 10 pcs.	<b>23-3082DDI</b>

# System CS™ Handles

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

	Length		Item no.
	w/o ratchet	with universal ratchet	
System CS™ handle, blue	•		13-1367CS
System CS™ handle, blue		•	13-1384CS





# Miniature Premium Bipolar Instruments

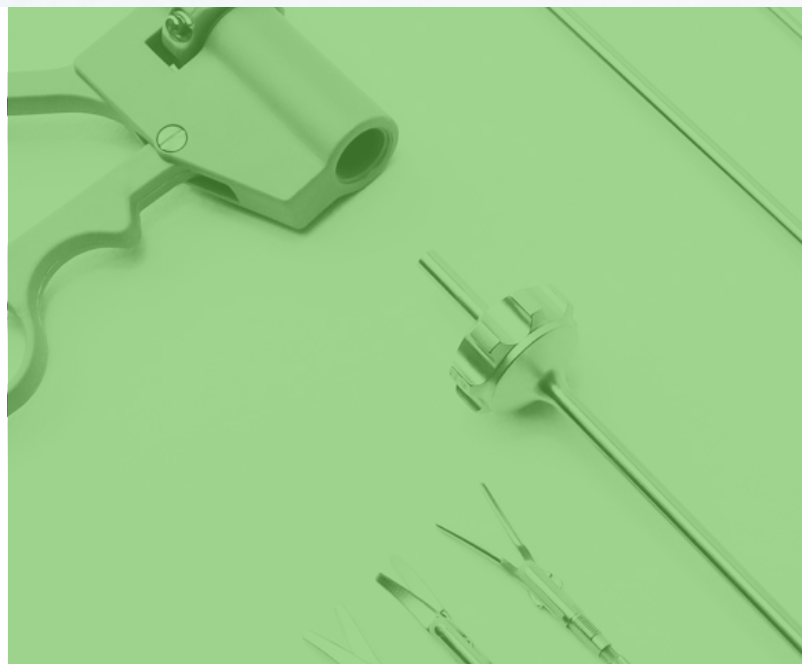
## Key Features

- **Quick exchange of electrode inserts** for different applications within only a few seconds, available in Ø 3 mm for Miniature Laparoscopy procedures
- 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
- Diameter of 3 mm with 290 mm WL



## Bipolar Mini Maryland Grasping Forceps, Premium Line

For Use with 23-3090 and 23-3091



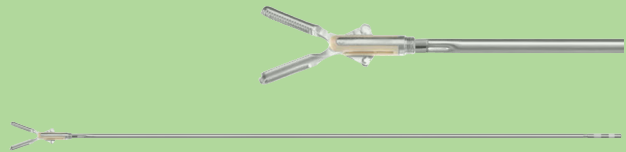
**Miniature Maryland grasping forceps**, bipolar insert, double-action, Ø 3 mm, 290 mm

Item no.

**23-3025BP**

## Bipolar Mini Fenestrated Grasper, Premium Line

For Use with 23-3090 and 23-3091



**Miniature fenestrated grasping forceps**, bipolar insert, double-action, Ø 3 mm, 290 mm

Item no.

**23-3082BP**

## Bipolar Mini Metzenbaum Scissors, Premium Line

For Use with 23-3090 and 23-3091



**Miniature Metzenbaum scissors**, bipolar insert, double-action, Ø 3 mm, 290 mm

Item no.

**23-3000BP**

## Handle for Bipolar Inserts

For Use with Miniature Premium Bipolar Instruments



	Item no.
<b>Handle</b> for miniature bipolar detachable instrument, use with 23-3091	<b>23-3090</b>

## Sheath for Bipolar Inserts

For Use with Miniature Premium Bipolar Instruments



	Item no.
<b>Sheath</b> for miniature bipolar detachable instruments, Ø 3 mm, 290 mm	<b>23-3091</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**
- **Ø 3 mm diameter for Miniature Laparoscopy** procedures

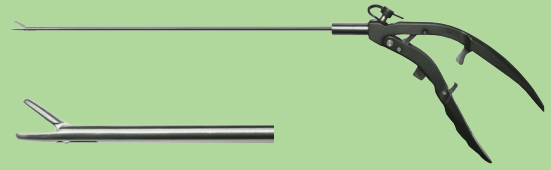


## ... more Features

- Adjustable ratchet
- Despite its weight very robust and durable
- Instrument cleaning port
- With 200 mm or 360 mm working length



## Miniature Axial Needleholders, Straight Jaws



	Length		Item no.
	200 mm	360 mm	
Miniature axial needleholder, straight jaws, angled handle, Ø 3 mm	•		23-3026P-20
Miniature axial needleholder, straight jaws, angled handle, Ø 3 mm		•	23-3026P

## Miniature Axial Needleholders, Right Curved Jaws



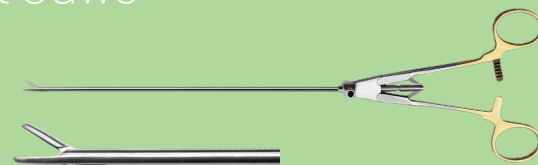
	Length		Item no.
	200 mm	360 mm	
Miniature axial needleholder, right curved jaws, angled handle, Ø 5 mm	•		23-3027P-20
Miniature axial needleholder, right curved jaws, angled handle, Ø 5 mm		•	23-3027P

## Miniature Axial Needleholders, Left Curved Jaws



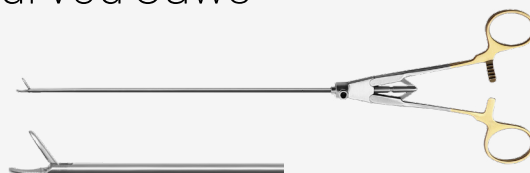
	Length		Item no.
	200 mm	360 mm	
Miniature axial needleholder, left curved jaws, angled handle, Ø 3 mm	•		23-3028P-20
Miniature axial needleholder, left curved jaws, angled handle, Ø 3 mm		•	23-3028P

## Miniature Needleholders, Straight Jaws



	Length		Item no.
	200 mm	330 mm	
<b>Miniature needleholder</b> , straight jaws, axial handle, Ø 3 mm	•		<b>23-3026AX-20</b>
<b>Miniature needleholder</b> , straight jaws, axial handle, Ø 3 mm		•	<b>23-3026AX</b>

## Miniature Needleholders, Right Curved Jaws



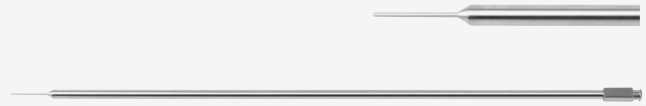
	Length		Item no.
	200 mm	330 mm	
<b>Miniature needleholder</b> , righttt curved jaws, axial handle, Ø 3 mm	•		<b>23-3027AX-20</b>
<b>Miniature needleholder</b> , right curved jaws, axial handle, Ø 3 mm		•	<b>23-3027AX</b>

## Miniature Needleholders, Left Curved Jaws



	Length		Item no.
	200 mm	330 mm	
<b>Miniature needleholder</b> , left curved jaws, axial handle, Ø 3 mm	•		<b>23-3028AX-20</b>
<b>Miniature needleholder</b> , left curved jaws, axial handle, Ø 3 mm		•	<b>23-3028AX</b>

## Miniature LL Injection Needle



	<b>Item no.</b>
<b>Miniature injection needle</b> (Ø 1.2 mm / 18 gauge) with Luer Lock, Ø 2.8 mm, 330 mm	<b>13-1619-3</b>

## Miniature Knot Pusher



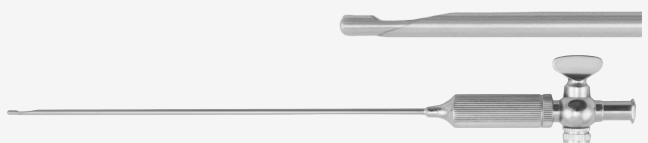
	<b>Item no.</b>
<b>Miniature knot pusher</b> , Ø 3 mm, open eyelet, 330 mm	<b>13-1617-3</b>

## Miniature Palpation Probe



	<b>Item no.</b>
Graduated <b>miniature palpation probe</b> , Ø 3 mm, open eyelet, 330 mm	<b>10-1110-3</b>

## Miniature Verres Needle



	<b>Item no.</b>
<b>Miniature verres needle</b> , Ø 2 mm, 120 mm	<b>10-1105</b>



[www.ackermannsurgical.com](http://www.ackermannsurgical.com)



**Ackermann Instrumente GmbH**  
Eisenbahnstrasse 65-67  
78604 Rietheim-Weilheim, Germany

Revision 04/22