
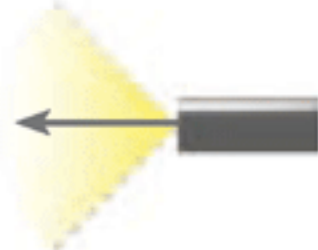
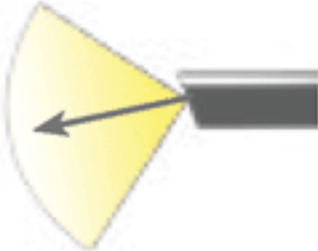
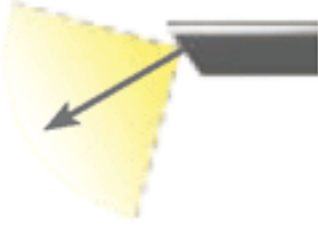





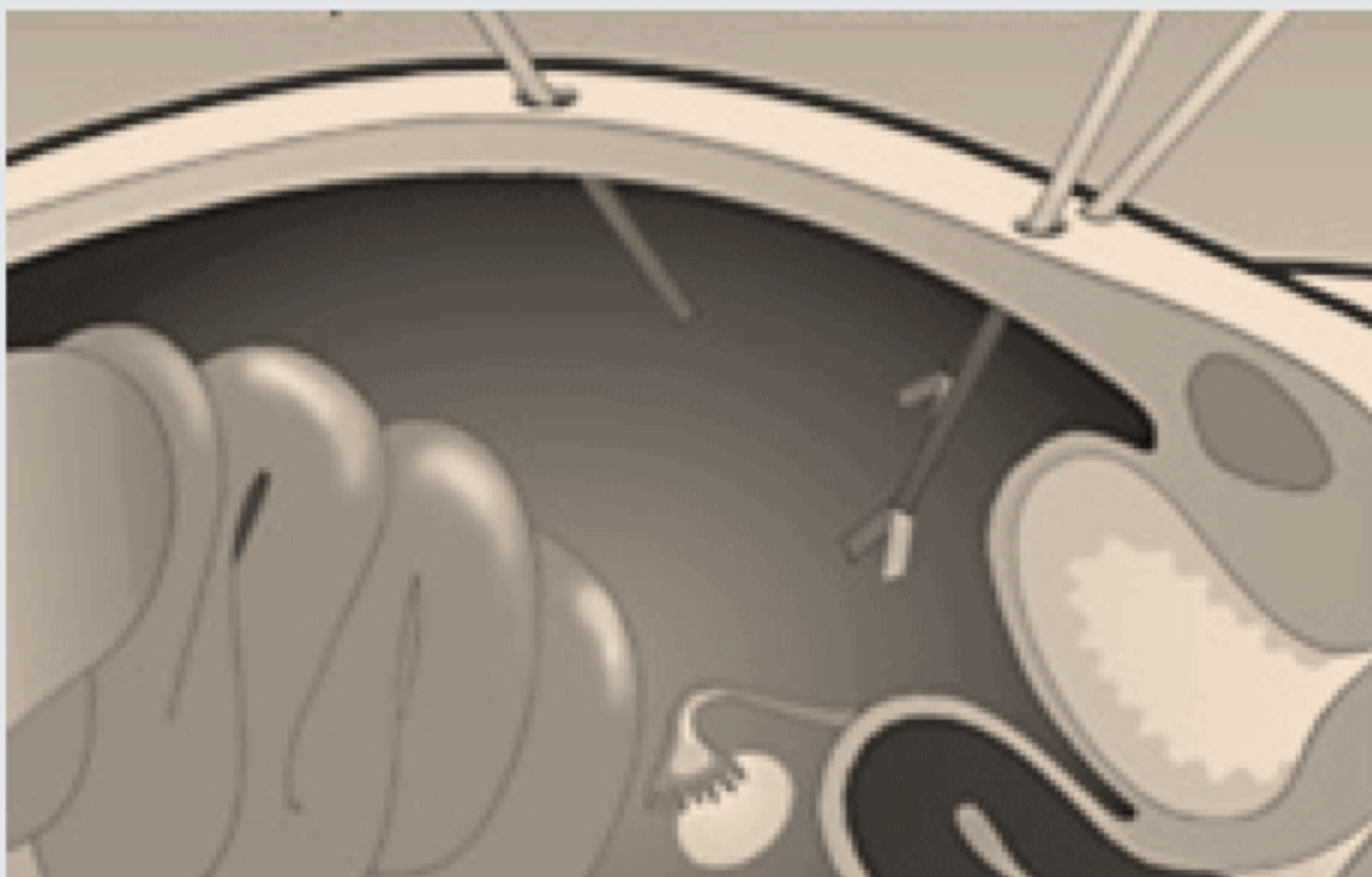
Optiken | *telescopes*



Optiken für Urologie
telescopes for urology

Art.Nr.	Beschreibung <i>Description</i>	Size	Spez.
			
601-104-00	Optik; autoklavierbar telescope; autoclavable <i>óptica; autoclavable</i> <i>cistoscopio; autoclavabile</i>	Ø 4 mm; 300 mm	0°
			
601-104-12	Optik; autoklavierbar telescope; autoclavable <i>óptica; autoclavable</i> <i>cistoscopio; autoclavabile</i>	Ø 4 mm; 300 mm	12°
			
601-104-30	Optik; autoklavierbar telescope; autoclavable <i>óptica; autoclavable</i> <i>cistoscopio; autoclavabile</i>	Ø 4 mm; 300 mm	30°
			
601-104-70	Optik; autoklavierbar telescope; autoclavable <i>óptica; autoclavable</i> <i>cistoscopio; autoclavabile</i>	Ø 4 mm; 300 mm	70°
			

Tontarra Endoscopic Equipment and Devices



- Imaging
- Illumination
- Insufflation

Endoscopy Camera, 1CCD M-CAM 2400, Digital Video Camera



- **M-CAM 2400**

1-CCD camera for endoscopic applications. Full digital signal processing guarantees true colour reproduction and outstanding image quality. A high sensitive, high resolution 1/3" CCD ensures high clarity and sharp detailed images for every endoscopic application. It is easy and flexible to use. The 1CCD camera can be adjusted individually via integrated On-Screen-Menu. The camera head is small and light. The camera head can be immersed in disinfectant solution for sterilisation (using attached cap).

- **WHITE BALANCE**

White Balance is done automatically via push-button.

- **WINDOW FUNCTION**

Window Function is programmed for different brightness measurement fields in case of difficult illumination conditions. Size can be adjusted via On-Screen-Menu.

- **ON-SCREEN-MENU**

Camera settings (like contrast, brightness, window size) can be made in the On-Screen-Menu. Settings are stored in memory.

Technical Data Sheet:

Video Camera	PAL, NTSC System	
Art. Nr.	602-101-01	
Specification		
CCD-sensor	1/3" with 440.000 pixel	
Video resolution	470 TV-lines horizontal	
Shutter control	automatic	
Shutter range	1/50 to 1/100.000	
Sensitivity	0,9 lx	
Connection		
Power supply	100/240 V AC	
Outputs		
	2 x Y/C	
	2 x VBS	
Settings		
	On-Screen-Menu	
Dimension (WxHxD)		
Unit	353 x 103 x 253 mm	
head	29 x 58 mm	
Weight		
	3,5 Kg	
	65 g	
Classification		
Class / Type	1 / BF	
Manufactured and tested acc.	IEC 601-1 / ☺ EN 60601-1 93/42 ECC	
Head	C-Mount thread immersable high flexible cable: 3 m	

Delivery contains:

main unit, camera head, power cable, Y/C cable, BNC cable, User manual.

Endoscopy Halogen Light Source M-H 250 DUO, Halogen Light Source



The M-H 250 DUO Halogen Light Source is a universal and easy-to-use unit with high intensity Halogen lamp. They can be used for nearly every endoscopic application. Variants with 2 lamps ensuring uninterrupted working if one lamp breaks down.

Special reflector lamps and infrared filters standing for best light coupling.

A softstart electronic expands the life time of the Halogen lamps.

The intensity is controlled by mechanical diaphragm without changing the colour temperature.

Technical Data Sheet:

Art. Nr.	602-210-25
Power supply	110/115 V AC and 230/240 V AC, switchable
Power consumption	260 W
Dimensions (WxHxD)	355 x 110 x 347 mm
Weight	8,0 kg
Lamp	2x Halogen reflector lamp 250 Watt, 24 V
Colour temperature	5600 °K
Life time	indicator
Light Guide connection type	Storz connector
Class / Type	1 / BF
Manufactured and tested acc.	IEC 601-1 / EN 60601-1 93/42 ECC

Delivery contains:

main unit, power cable, user manual.

Spare parts:

602-290-25 Spare bulb 250 W Halogen

Active Fibre Light Cable for Halogen Light Sources



Artikel Nr. Order No.	Ø mm	Arbeitslänge Working Length
540-803-18	3,5 mm	1800 mm
540-803-23	3,5 mm	2300 mm
540-803-30	3,5 mm	3000 mm
540-805-18	4,8 mm	1800 mm
540-805-23	4,8 mm	2300 mm
540-805-30	4,8 mm	3000 mm

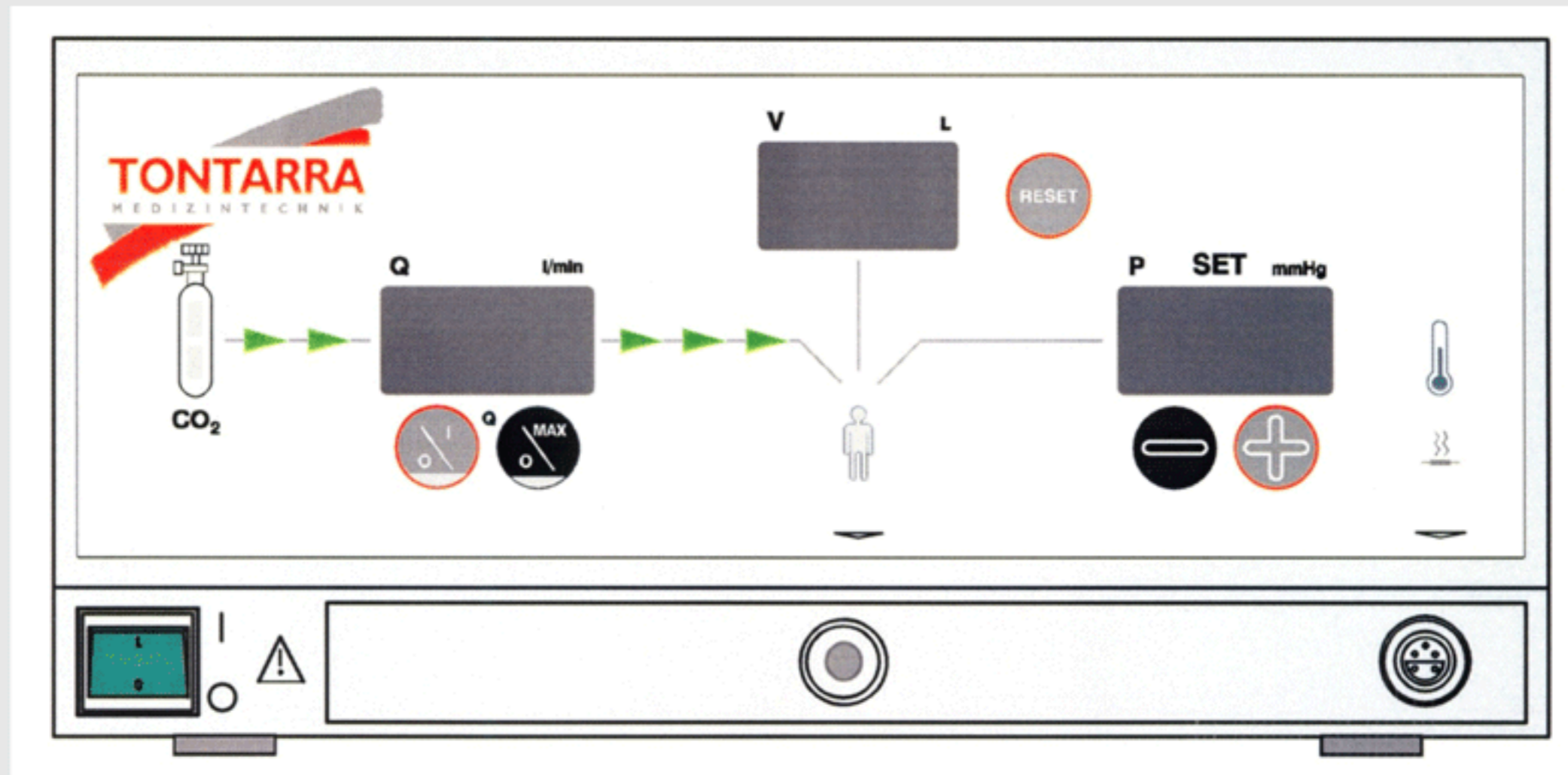
Active Fibre Light Cable for Xenon Light Sources and Halogen Light Sources



High Temperature Resistance for
XENON Light Sources

Artikel Nr. Order No.	Ø mm	Arbeitslänge Working Length
540-813-18	3,5 mm	1800 mm
540-813-23	3,5 mm	2300 mm
540-813-30	3,5 mm	3000 mm
540-815-18	4,8 mm	1800 mm
540-815-23	4,8 mm	2300 mm
540-815-30	4,8 mm	3000 mm

Endoscopy CO₂ Insufflator 30l



The 30l CO₂ Insufflator are controlled by microprocessors of the latest generation. Stable pressure balance in the abdomen is guaranteed by high gas flow performance and low insufflation pressure.

- **SAFETY**

Automatic security and diagnostic check, activated each time unit is switched on, makes sure all electronic and pneumatic components are in good running conditions. This safety feature carries a guarantee for the lifetime of the unit. The changeable sterile filter prevents reflux of liquids and contamination of the gas way. Audio-visual alarm in case of pressure excess of 5 mmHg and bottle pressure lower than 25 bar

- **GAS HEATING**

For reduction of post surgery problems the Insufflator is available with a high efficient gas heater. The gas heater is preadjusted and works on a plug and play base fully automatically.

Technical Data Sheet:

	30 l	30l; with gas heating
Art. Nr.	602-300-30	602-310-30 (220 V)
		602-311-30 (110 V)
Specification		
Insufflation medium	CO ₂ medical grade gas	
Pressure setting	5- 25 mmHg	
Maximum gas flow	30l/min	30l/min
Indication		
Abdominal pressure	Tolerances +/- 3 mmHg	
Gas flow	+/- 0,5 l/min	
Gas consumption	+/- 15%	
Connection		
Power supply	110-240 V AC	220-240 V AC 110-115 V AC
Power consumption	45 VA	90 VA
Dimension (WxHxD)	340 x 140 x 20 mm	
Weight	6 ,0 Kg	6,5 Kg
Classification	II a	
Class / Type	1 / CF	
Manufactured and tested acc.	IEC 601-1 / EN 60601-1 93/42 ECC	
Interface		
to patient	Gas connection conus	
CO2 bottle connection	DIN	

Delivery contains:

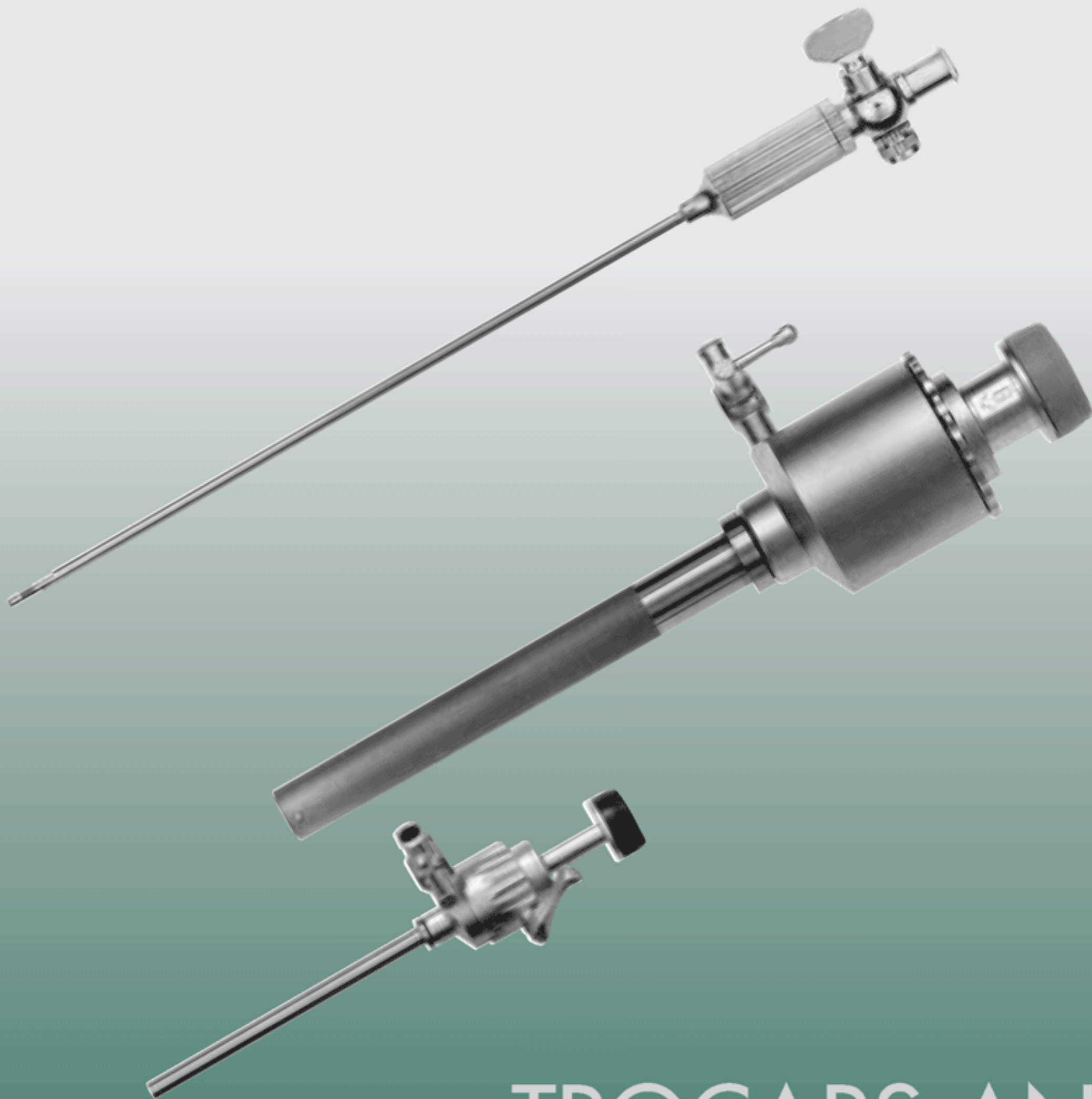
Main unit, user manual, power cable, protocol, insufflations tube

Accessories for Insufflation:

602-390-01 High pressure tube DIN-DIN

602-390-02 High pressure tube DIN-PIN

602-390-03 High pressure tube DIN-Italy



TROCARS AND ACCESSORIES

VERESS insufflation cannulas

VERESS Insufflationskanülen mit Durchflußhahn und Luer-Lock-Ansatz VERESS insufflation cannula, with stopcock and Luer-Lock connector



Artikel Nr. Order No.	Arbeitslänge Working Length	Durchmesser Ø Diameter Ø	Artikel Nr. Order No.	Arbeitslänge Working Length	Durchmesser Ø Diameter Ø
524-002-06	55 mm	2,0 mm	524-002-14	140 mm	2,0 mm
524-002-07	70 mm	2,0 mm	524-002-15	150 mm	2,0 mm
524-002-08	80 mm	2,0 mm	524-002-17	170 mm	2,0 mm
524-002-10	100 mm	2,0 mm	524-002-18	180 mm	2,0 mm
524-002-12	120 mm	2,0 mm	524-002-20	200 mm	2,0 mm
524-002-13	130 mm	2,0 mm	524-002-23	230 mm	2,0 mm

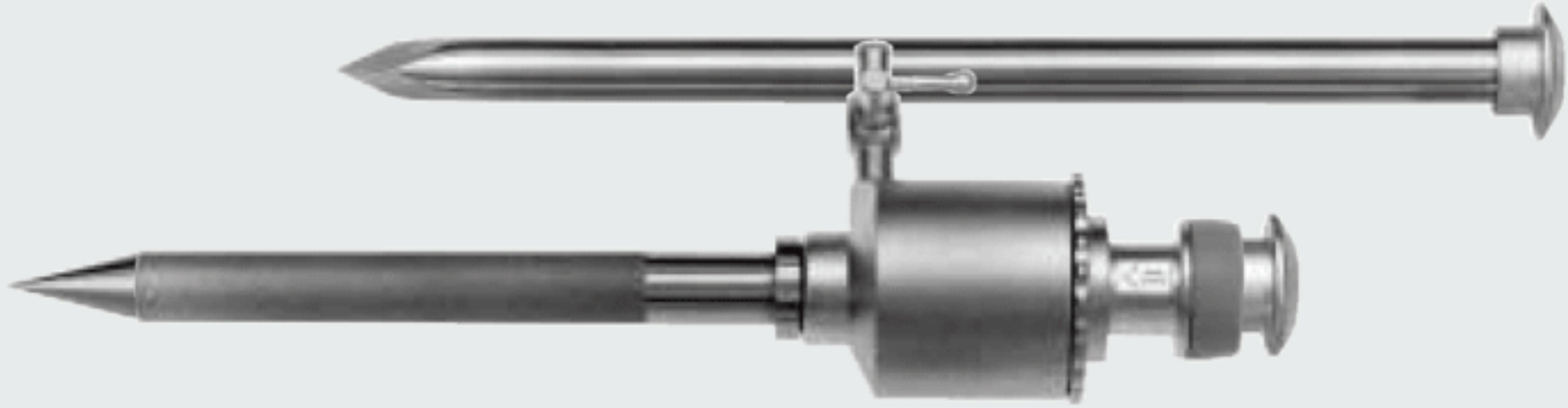
VERESS Insufflationskanülen mit auswechselbarer Außenkanüle, Durchflußhahn und Luer-Lock-Ansatz VERESS insufflation cannula with interchangeable cannula, stopcock and Luer-Lock connector



Instrument komplett Instrument complete	Außenkanüle Outer cannula	Grundkörper Body only	Arbeitslänge Working length	Durchmesser Ø Diameter Ø
524-010-10	524-014-10	524-012-10	100 mm	2,0 mm
524-010-12	524-014-12	524-012-12	120 mm	2,0 mm
524-010-15	524-014-15	524-012-15	150 mm	2,0 mm

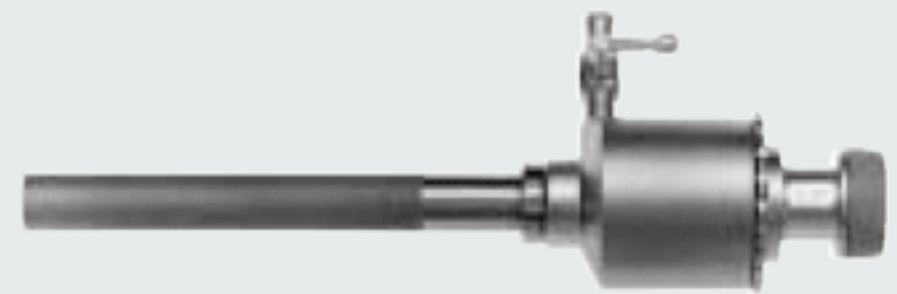
Automatic trocar sleeves, Ø 5.5 mm

Automatik-Trokarhülsen Ø 5,5 mm / Automatic trocar sleeves Ø 5.5 mm



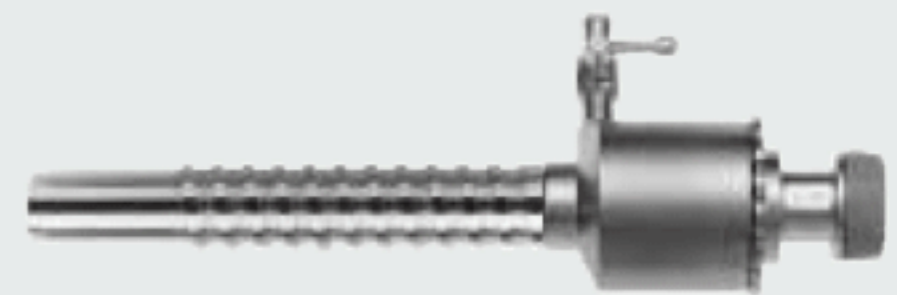
Automatik-Trokarhülse mit Metallschaftrohr, glatt
Automatic trocar sleeve with metal tube, smooth

Hülse allein Sleeve only	mit Trokar konisch with conical trocar	mit Trokar dreikant with pyramidal trocar	Arbeitslänge Working Length
525-002-06	525-002-06C	525-002-06P	95 mm



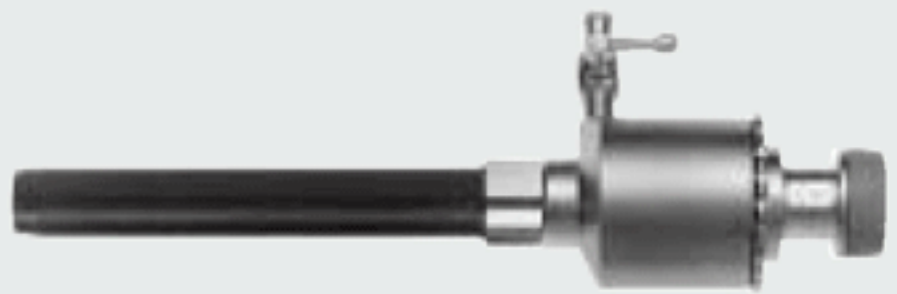
Automatik-Trokarhülse mit Metallschaftrohr mit Gewinde
Automatic trocar sleeve with metal tube with thread

Hülse allein Sleeve only	mit Trokar konisch with conical trocar	mit Trokar dreikant with pyramidal trocar	Arbeitslänge Working Length
525-003-06	525-003-06C	525-003-06P	98 mm



Automatik-Trokarhülse mit Kunststoffrohr, glatt
Automatic trocar sleeve with plastic tube, smooth

Hülse allein Sleeve only	mit Trokar konisch with conical trocar	mit Trokar dreikant with pyramidal trocar	Arbeitslänge Working Length
525-004-06	525-004-06C	525-004-06P	95 mm














Automatik-Trokarhülse mit Kunststoffrohr mit Gewinde
Automatic trocar sleeve with plastic tube with thread

Hülse allein Sleeve only	mit Trokar konisch with conical trocar	mit Trokar dreikant with pyramidal trocar	Arbeitslänge Working Length
525-005-06	525-005-06C	525-005-06P	98 mm



Automatic trocar sleeves, Ø 5.5 mm



Trokare Ø 5,5 mm / Trocars 5.5 mm		
Trokar mit Dreikantschliff Trocar with pyramidal tip		
525-051-06	170 mm	
Trokar mit Kegelschliff Trocar with conical tip		
525-050-06	172 mm	
Trokar mit Dreikantschliff, mit Loch Trocar with pyramidal tip, with hole		
525-055-06	170 mm	
Trokar mit Kegelschliff, mit Loch Trocar with conical tip, with hole		
525-054-06	172 mm	
Sicherheitstrokar mit Dreikantschliff Protection trocar with pyramidal tip		
525-060-06	160 mm	
Sicherheitstrokar mit schrägem Schliff Protection trocar with oblique tip		
525-061-06	160 mm	
Schutztrokar stumpf Protection trocar blunt		
525-063-06	160 mm	
Schutztrokar mit schrägem Schliff Protection trocar with oblique tip		
525-062-06	160 mm	
Trokarstopp / Trocar stop		
Trokarstopps Trocar stop		
525-090-06	20 mm	
525-091-06	50 mm	
Ersatzteile / Spare Parts		
525-910-06	Ersatzteil-Set, bestehend aus: O-Ring, Dichtkappe Innendichtung Spare parts set, consisting of: O-ring, sealing cap, inner seal	
525-900-06	Dichtkappen, rot, für Automatik-Trokare Ø 5,5 mm Packung mit 10 Stück Sealing caps, red, for automatic trocars Ø 5.5 mm pack with 10 pcs.	

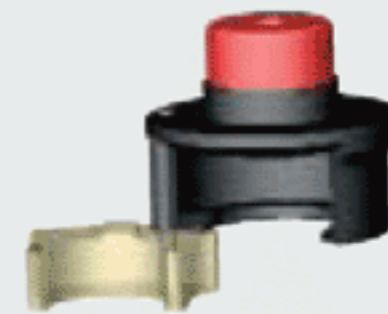
Reduzierhülsen für alle Trokarhülsen / Reducer for all trocar sleeves

Artikel Nr. Order No.	Durchmesser Ø Diameter Ø	Arbeitslänge Working Length
525-100-01	10 – 5,5 mm	190 mm
525-100-02	11 – 5,5 mm	190 mm
525-100-03	12,5 – 10 mm	190 mm
525-100-04	12,5 – 5,5 mm	190 mm
525-100-05	15 – 10 mm	190 mm
525-100-06	15 – 5,5 mm	190 mm
525-100-07	20 – 15 mm	190 mm
525-100-08	20 – 10 mm	190 mm
525-100-09	20 – 5,5 mm	190 mm



Reduzierer für Automatiktrokarhülsen / Reducer for automatic trocar sleeves

Artikel Nr. Order No.	Durchmesser Ø Diameter Ø
525-115-01	10 – 5,5 mm
525-115-02	11 – 5,5 mm
525-115-03	12,5 – 5,5 mm
525-115-04	12,5 – 10 mm



Reduzierer für Automatiktrokarhülsen / Reducer for automatic trocar sleeves

Artikel Nr. Order No.	Durchmesser Ø Diameter Ø
525-016-01	8 – 5,5 mm
525-016-02	10 – 5,5 mm
525-016-03	11 – 5,5 mm
525-016-04	11 – 8 mm
525-016-05	12,5 – 5,5 mm
525-016-06	12,5 – 8 mm
525-016-07	12,5 – 10 mm



525-110-01	10 – 5,5 mm
525-110-02	11 – 5,5 mm
525-110-03	12,5 – 5,5 mm
525-110-04	12,5 – 10 mm
525-110-05	15 – 5,5 mm
525-110-06	15 – 10 mm
525-110-07	20 – 5,5 mm
525-110-08	20 – 10 mm



Laparoscopy Instrument System

Enddoor



Laparoscopy Instrument System

Enddoor

The word 'Enddoor' is written in a large, bold, black sans-serif font. A stylized black graphic of a laparoscopic instrument handle is positioned above the 'd' and 'o' of 'door', with a horizontal line extending from the handle to the left.

Technical Specifications:

- made of high-quality fiber-glass-reinforced plastics
- the system is a monopolar three-part 360° rotatable take-apart instrument
- easy and intuitive assembly and disassembly
- unique and mechanically safe connection system
 - connection insert-sheath; bayonet
 - connection shaft-handle; by extra drafted thread
- free from backlash mechanics for one-to-one tactile feedback
- the integrated ratchet can be easily activated or deactivated by rotating the selector
- ON/OFF ratchet
- shielded HF connector
- accurate shaft coating with optimal insulation and superb sliding characteristics
- smooth-running ratchet design with elliptical tooth shape

Ergonomics:

- improved ergonomic design, fits to all hand sizes
- ergonomic ring design for better grip and contact
- adjusting wheel specially designed for optimal ergonomic positioning of jaw
- various ergonomic finger positions possible which allows stressless surgery







Manufacturing:

- manufactured according to Tontarra-defined precision mechanics standards and measurement
- the three-part design allows an easy maintenance and cleaning
- the instrument is designed for continuously variable rotation allowing highly precise manipulation
- special purple color design for easy locating
- fully autoclavable
- exclusively made in Germany









Laparoscopy Instrument Handle; Shaft

Art.Nr.	Description	Size	Spez.
610-001-00	Handle without ratchet		
610-005-00	Handle with ratchet ratchet can be optionally activated or deactivated		
610-010-53	Shaft isolated with Isolation coating and Cap Nut	Ø 5 mm 330 mm	
			
610-020-93	Shaft isolated with Isolation coating and Cap Nut	Ø 10 mm 330 mm	











Laparoscopy Instrument Inserts Ø5 mm Scissors

Art.Nr.	Description	Size	Spez.
610-100-53	METZENBAUM Scissors curved double action jaw serrated	Ø 5mm 330 mm	
			 610-010-53; Shaft 610-001-00; Handle
610-150-53	Hook scissors straight single action jaw	Ø 5 mm 330 mm	
			 610-010-53; Shaft 610-001-00; Handle
610-155-53	Peritoneal scissors straight single action jaw	Ø 5 mm 330 mm	
			 610-010-53; Shaft 610-001-00; Handle











Laparoscopy Instrument Inserts Ø5 mm Grasping forceps; double action

Art.Nr.	Description	Size	Spez.
610-200-53	Atraumatic grasping forceps pointed double action jaw	Ø 5 mm 330 mm	
			 610-010-53; Shaft
610-202-53	MARYLAND Dissection and Grasping forceps double action jaw	Ø 5 mm 330 mm	
			 610-010-53; Shaft
610-204-53	MARYLAND; tapered Dissection and Grasping forceps double action jaw	Ø 5 mm 330 mm	
			 610-010-53; Shaft
610-210-53	Dissection and Grasping forceps fenestrated straight double action jaw	Ø 5 mm 330 mm	
			 610-010-53; Shaft







Laparoscopy Instrument Inserts Ø5 mm Grasping forceps; double action

Art.Nr.	Description	Size	Spez.
610-212-53	ENDO CLINCH Grasping forceps fenestrated straight double action jaw	Ø 5 mm 330 mm	
		 610-010-53; Shaft	
610-214-53	Grasping forceps with reservoir blunt double action jaw	Ø 5 mm 330 mm	
		 610-010-53; Shaft	
610-206-53	KERNAN Grasping forceps double action jaw	Ø 5 mm 330 mm	
		 610-010-53; Shaft	
610-216-53	Grasping forceps wave style double action jaw	Ø 5 mm 330 mm	
		 610-010-53; Shaft	
610-218-53	JOHAN Grasping forceps double action jaw	Ø 5 mm 330 mm	
		 610-010-53; Shaft	



Laparoscopy Instrument Inserts Ø5 mm Grasping forceps; single action

Art.Nr.	Description	Size	Spez.
610-250-53	JOHAN Grasping forceps single action jaw	Ø 5 mm 330 mm	
		 610-010-53; Shaft	
610-252-53	MAHNES Grasping forceps fine teeth single action jaw	Ø 5 mm 330 mm	
		 610-010-53; Shaft	
610-254-53	Grasping forceps wave style single action jaw	Ø 5 mm 330 mm	
		 610-010-53; Shaft	
610-256-53	Claw forceps single action jaw	Ø 5 mm 330 mm	
		 610-010-53; Shaft	
610-258-53	Dissector strong curved delicate serrated single action jaw	Ø 5 mm 330 mm	
		 610-010-53; Shaft	

Laparoscopy Instrument Inserts Ø5 mm Grasping forceps

Art.Nr.	Description	Size	Spez.
610-300-53	BABCOCK Grasping forceps double action jaw	Ø 5 mm 330 mm	
		 610-010-53; Shaft	
610-350-53	Biopsy forceps single action jaw	Ø 5 mm 330 mm	
		 610-010-53; Shaft	
610-352-53	Biopsy punch single action jaw	Ø 5 mm 330 mm	
		 610-010-53; Shaft	

Laparoscopy Instrument Inserts Ø10 mm

Art.Nr.	Description	Size	Spez.
610-400-93	Claw Forceps	Ø 10 mm	
			
610-406-93	Spoon forceps	Ø 10 mm	
			

Endoor Cut Semi-Disposable Laparoscopy Instrument System

Interchangeable disposable instrument tips
with reusable Handle-/ Shaft-System

Art.Nr.	Description	Size	Spez.
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610-002-95	Shaft isolated for disposable tips, REUSABLE Ø 5 mm		
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610-001-00	Endoor handle without ratchet (page 4)		
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482-900-00	METZENBAUM disposable scissors; tip only curved; standard version 16 mm sterile	Ø 5 mm	
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482-900-01	METZENBAUM disposable scissors; tip only curved; short version 10 mm sterile	Ø 5 mm	
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482-900-02	METZENBAUM disposable scissors; tip only curved; long version 20 mm sterile	Ø 5 mm	
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482-900-03	METZENBAUM disposable scissors; tip only straight; long version 20 mm sterile	Ø 5 mm	
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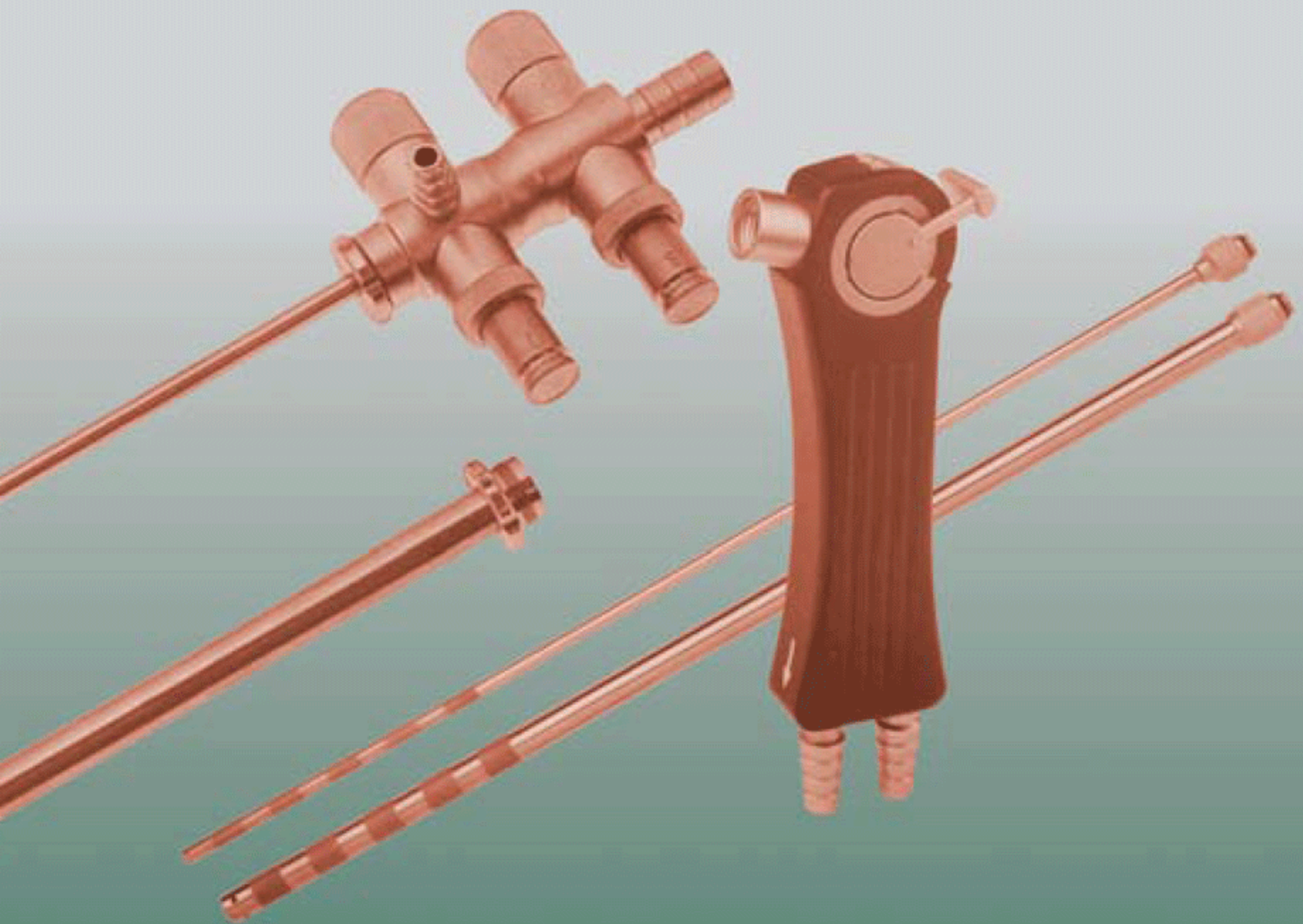


482-900-10	MARYLAND disposable dissector; tip only curved sterile	Ø 5 mm	
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482-900-11	ENDO CLINCH disposable grasping forceps tip only; fenestrated; straight sterile	Ø 5 mm	
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SUCTION/IRRIGATION SYSTEMS



Großer Pistolengriff mit 2-Wege-Schiebeventil, 2 Schlauchadapter
Big Pistol Handle with 2-Way-Sliding Valve, 2 tubing connectors

521-000-99



Saug-/Spülrohr Ø 3,0 mm, für großen Pistolengriff
Suction-/Irrigation tube, Ø 3.0 mm, for Big Pistol Handle

521-000-90



Saug-/Spülrohr Ø 5,0 mm, für großen Pistolengriff
Suction-/Irrigation tube, Ø 5.0 mm, for Big Pistol Handle

521-000-91



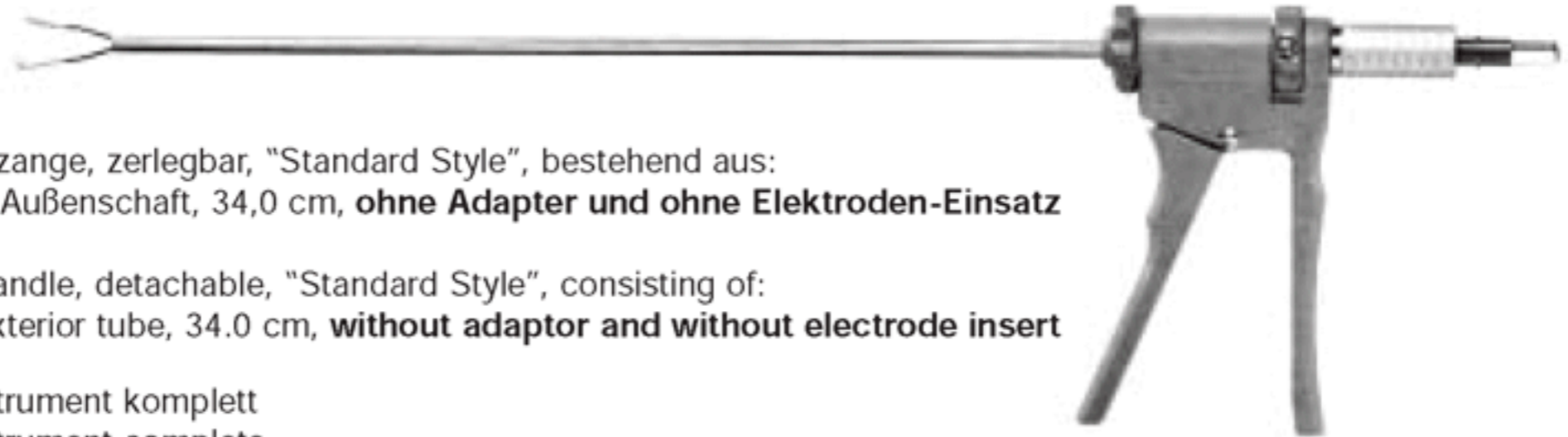
Saug-/Spülrohr Ø 10,0 mm, für großen Pistolengriff
Suction-/Irrigation tube, Ø 10.0 mm, for Big Pistol Handle

521-000-92



COAGULATION FORCEPS AND ELECTRODES

"Standard Style"

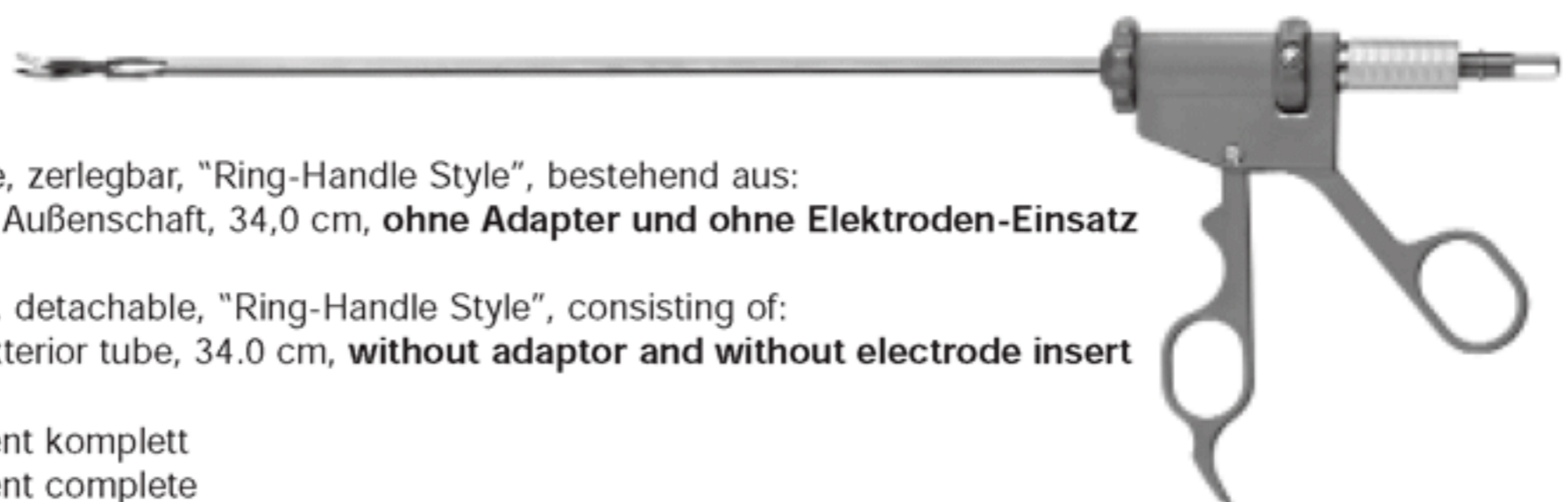


Bipolare Koagulationszange, zerlegbar, "Standard Style", bestehend aus:
 Griff, Innenschaft und Außenschaft, 34,0 cm, **ohne Adapter und ohne Elektroden-Einsatz**

Bipolar Coagulation handle, detachable, "Standard Style", consisting of:
 Handle, interior and exterior tube, 34.0 cm, **without adaptor and without electrode insert**

496-850-34	Instrument komplett Instrument complete
496-860-34	Innenschaft allein Interior tube, only
496-865-34	Außenschaft allein Exterior tube only
496-850-00	Griff allein Handle only

"Ring-Handle Style"



Bipolare Koagulationszange, zerlegbar, "Ring-Handle Style", bestehend aus:
 Ring-Griff, Innenschaft und Außenschaft, 34,0 cm, **ohne Adapter und ohne Elektroden-Einsatz**

Bipolar Coagulation handle, detachable, "Ring-Handle Style", consisting of:
 Ring-handle, interior and exterior tube, 34.0 cm, **without adaptor and without electrode insert**

496-855-34	Instrument komplett Instrument complete
496-860-34	Innenschaft allein Interior tube, only
496-865-34	Außenschaft allein Exterior tube only
496-855-00	Ring-Griff allein Ring-Handle only

- Fügen sie bitte "S" hinter die Artikelnummer der Elektrode um ein komplettes Instrument zu besellen (z.B. 496-828-34 S)
 For ordering the complete instrument put "S" after the electrode ref. number (e.g. 496-828-34 S)
- Adapter immer gesondert bestellen
 Always order adaptor extra
- Wenn sie andere Längen bestellen bitte die letzten zwei Nummern ändern (z.B. 496-828-20 Arbeitslänge 20,0 cm oder 496-828-45 Arbeitslänge 45,0 cm)
 For ordering different length change last two numbers (e.g. 496-828-20 working length 20.0 cm or 496-828-45 working length 45.0 cm)

Adapter für Bipolares Kabel mit Flachstecker (Adapter nur für "Standard-Style" und "Ring-Style")
 Adapter for Bipolar Cable with Flat Plug (Adaptor for "Standard-Style" and "Ring-Style" only)



496-880-00

- passend für "Standard Style", und "Ring-Handle Style"
- for "Standard Style", and "Ring-Handle Style"

METZENBAUM Scheren Einsatz, gebogen, 34,0 cm
 METZENBAUM Scissors insert curved, 34.0 cm

496-828-34



METZENBAUM Hartmetall-Scheren Einsatz, gebogen, 34,0 cm
 METZENBAUM TC Scissors insert curved, 34.0 cm

496-830-34



MARYLAND Dissektor Einsatz, gebogen, 34,0 cm
 MARYLAND Dissector insert curved, 34.0 cm

496-832-34



KLEPPINGER Einsatz gerieft, 34,0 cm
 KLEPPINGER insert serrated, 34.0 cm

496-824-34



TONG-TYPE BIT Einsatz, 3,0 mm, 34,0 cm
 TONG-TYPE BIT insert, 3.0 mm, 34.0 cm

496-826-34



PINZETTENSPITZEN Einsatz, 1,0 mm, 34,0 cm
 FLUTED BIT insert, 1.0 mm, 34.0 cm

496-822-34



Elektroden-Einsatz gefenstert, 34,0 cm
 Electrode insert fenestrated, 34.0 cm

496-820-34





Pistolengriff mit 2-Wege-Schiebeventil, Durchfluß 5 mm, LUER LOCK Ansatz und HF-Anschluß, für auswechselbare Elektroden
Pistol Handle with 2-Way-Sliding Valve, Flow 5 mm, LUER LOCK connector and HF-connector, for adaptable electrodes

521-000-70



Großer Pistolengriff mit 2-Wege-Schiebeventil, Durchfluß 8 mm, LUER LOCK Ansatz und HF-Anschluß, für auswechselbare Elektroden
Big Pistol Handle with 2-Way-Sliding Valve, Flow 8 mm, LUER LOCK connector and HF-connector, for adaptable electrodes

521-000-60

Adapter für Saug-/Spülgriff (521-000-60), allein
Adaptor for Suction-/Irrigation Handle (521-000-60), only







521-000-80



Gynäkologische Instrumente

gynecology instruments

Zubehör Morcellation
accessories for morcellation

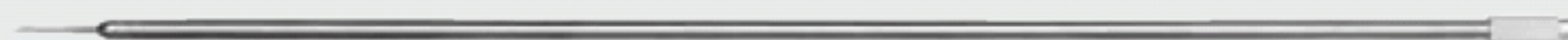
Art.Nr.	Beschreibung <i>Description</i>	Size	Spez.
	<p>Myombohrer myoma Drill tiramiona tiramioni</p> 		
587-210-33		FL Ø 10 mm 330 mm	
587-210-42		FL Ø 10 mm 420 mm	
587-205-32		FL Ø 5 mm 330 mm	
587-205-42		FL Ø 5 mm 420 mm	
587-220-10	<p>Krallengreifer; nicht zerlegbar claw forceps; 1 piece instrument pinza de garra; no desmontable pinza da presa ad artigli; non smontabile</p> 	FL Ø 10 mm 420 mm	
587-225-10	<p>Tenakulumzange; nicht zerlegbar tenaculum forceps; 1 piece instrument pinza para coger el cuello del útero; no desmontable pinza per tenacolo; non smontabile</p> 	FL Ø 10 mm 420 mm	
587-220-05	<p>Tenakulum; nicht zerlegbar tenaculum forceps; 1 piece instrument pinza para coger el cuello del útero; no desmontable pinza per tenacolo; non smontabile</p> 	FL Ø 5 mm 420 mm	

Einsteckkanüle / Puncture tube



Artikel Nr. Order No.	Durchmesser Ø Diameter Ø	Nutzlänge Working length
527-500-16	6 mm	160 mm
527-500-24	6 mm	235 mm

Punktions- und Injektionskanüle / Aspiration- and injection cannula



Artikel Nr. Order No.	Nadel Ø Needle Ø	Nutzlänge Working length	Durchmesser Ø Diameter Ø
527-050-33	0,7 mm	330 mm	5 mm
527-050-45	0,7 mm	450 mm	5 mm
527-052-33	0,9 mm	330 mm	5 mm
527-052-45	0,9 mm	450 mm	5 mm
527-054-33	1,2 mm	330 mm	5 mm
527-054-45	1,2 mm	450 mm	5 mm
527-056-33	1,4 mm	330 mm	5 mm
527-056-45	1,4 mm	450 mm	5 mm
527-058-33	1,5 mm	330 mm	5 mm
527-058-45	1,5 mm	450 mm	5 mm
527-060-33	1,8 mm	330 mm	5 mm
527-060-45	1,8 mm	450 mm	5 mm

Knotenschieber, mit Öse / Knot pusher, with eye



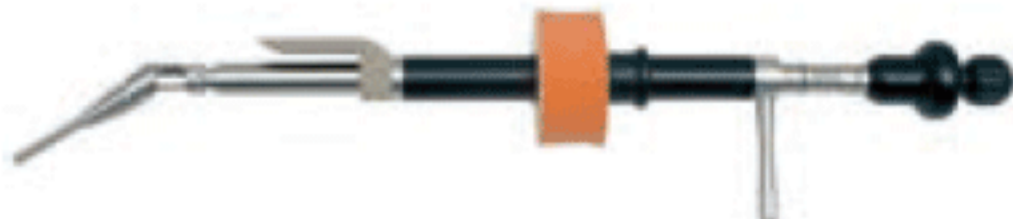



Artikel Nr. Order No.	Durchmesser Ø Diameter Ø	Nutzlänge Working length
527-303-00	4 mm	330 mm

Knotenschieber, mit Schlitz / Knot pusher, with slit





Artikel Nr. Order No.	Durchmesser Ø Diameter Ø	Nutzlänge Working length
527-305-33	4,5 mm	330 mm

Uterusmanipulator *uterus manipulator*

Art.Nr.	Beschreibung <i>Description</i>	Size	Spez.
587-100-00	Set Uterusmanipulator mit 8 Aufsätzen set uterus manipulator with 8 tips <i>juego - manipulador uterino con 8 puntas</i> <i>set per manipolatore uterino</i>		
587-100-50	Set Dichtungsaufsatz; Schaumstoff (3x) set closure sponge (3x) <i>juego - punta de cierre; espuma (3x)</i> <i>set spugna di chiusura (3x)</i>		
	Valven für Uterusmanipulator valves for uterus manipulator <i>valvas para el manipulador uterino</i> <i>valve per manipolatore uterino</i>		
587-108-01	small 20x50 mm		
587-108-02	medium 25x50 mm		
587-108-03	large 30x50 mm		
	Aufsätze für Manipulator tips for manipulator <i>puntas para el manipulador uterino</i> <i>puntali per manipolatore</i>		
587-110-02	20 mm		
587-110-03	30 mm		
587-110-04	40 mm		
587-110-05	50 mm		
587-110-06	60 mm		
587-110-07	70 mm		
587-110-08	80 mm		
587-110-09	90 mm		
587-110-10	100 mm		
587-110-11	110 mm		
587-110-12	120 mm		
587-110-00	Set mit 11 Aufsätzen set with 11 tips <i>juego con 11 puntas</i> <i>set di 11 puntali</i> 587-110-02; 587-110-03; 587-110-04; 587-110-05; 587-110-06; 587-110-07 587-110-08; 587-110-09; 587-110-10; 587-110-11; 587-110-12		

Ringapplikator ring-applicator

Art.Nr.	Beschreibung Description	Size	Spez.
587-230-30	<p>Ringapplikator zur Tubensterilisation für Ø 7,0 mm Trokare ring-applicator for tube sterilization, Ø 7,0 mm trocar aplicador de anillos para la esterilización de trocadores et uso con los trocadores de Ø 7,0 mm applicatore per anelli con ricaricatore per la chiusura delle tube da utilizzare con tre quarti da Ø 7,0 mm</p>		
587-235-30	<p>Ringapplikator für OP-Laparoskopie-Optik ring-applicator for OP-laparoscope aplicador de anillos para la esterilización de trocadores et uso con laparoscopios operativos de Ø 6,0 mm applicatore per anelli con ricaricatore per la chiusura delle tube da utilizzare con laparoscopi con canale operativo da Ø 6,0 mm</p>		

Zubehör Ringapplikator accessories for ring-applicator

587-231-65	<p>Schieber applier cargador para anillos de ligadura ricaricatore per anelli da legatura</p>		
587-232-65	<p>Konusteil insert cone cono para anillos de ligadura cono singolo per anelli da legatura</p>		



ES350 TECHNICAL DATA

POWER SUPPLY

Supply voltage	230V 50 Hz
Rated power input	500W

SAFETY FEATURES

Protection against electric shock	
Class	I
Grade	CF
Low-frequency leakage currents	according to IEC 601-1-1
High-frequency leakage currents	according to IEC 601-2-2
Generator operation frequency	depends on version 350-450kHz
Defibrillation impulse resistance	according to EN 60601-1
NEM System	neutral electrode application control
AUTOTEST	self-test of generator and accessories after switching the power on, service codes display generator overload protection

OVERLOAD

MONOPOLAR CUTTING

Pure cutting	350W
Blend cutting I	180W
Blend cutting II	150W
Blend cutting III	150W
Cutting with desiccation	150W
Cutting in water environment	350W

MONOPOLAR COAGULATION

Soft coagulation	180W
Forced coagulation	180W
Spray coagulation	80W
Universal coagulation	80W

BIPOLAR COAGULATION

Bipolar coagulation	120W
Auto-Start / Auto-Stop	automatic start and stop of bipolar coagulation

BIPOLAR CUTTING

Bipolar cutting (4 different levels of haemostasis)	100W
Bipolar cutting in water environment	350W

WEIGHT AND DIMENSIONS

Length	420mm
Width	380mm
Height	160mm
Weight	9kg

OTHER FEATURES

PowerStart System	simplify the beginning of cutting process
SURGILOGIC System	automatic power regulation depends on needs
PP program	alternating cut&coag - endoscopic program
Program memory	9 different memory locations
MultiSwitch	remote program selection with using MultiSwitch footswitch