



HD - KOMPAKTEINHEIT

HD - COMPACT UNIT

TEKNO CAM 3700 HD - KOMPAKTEINHEIT

TEKNO CAM 3700 HD - COMPACT UNIT

Die TeknoCam 3700 HD vereint drei hochwertige Geräte für den professionellen Einsatz in einem kompakten Gehäuse. Die Kamera besticht durch ihr brillantes und scharfes HD Bild, ergänzt durch die exzellente Leuchtkraft der LED-Lichtquelle und die Archivierungsmöglichkeit von Bildern und Videos in HD-Qualität.

Dadurch wird die TeknoCam 3700 HD zum Multitalent mit vielfachen Einsatzmöglichkeiten und hoher Funktionalität. Das eingebaute Touchscreen-Display ermöglicht die schnelle, einfache und intuitive Bedienung der verschiedenen Funktionen. Zusätzlich können alle Funktionen auch über ein optional erhältliches Tablet gesteuert werden.

KAMERA / KAMERAKOPF

Die Kontrolleinheit bietet die Möglichkeit zwei verschiedene Kameraköpfe (3 CMOS HD / 1 CMOS HD), die jeweils ein Full-HD (1080p) Bild im Verhältnis 16:9 generieren, anzuschließen. Dadurch kann die TeknoCam 3700 HD in den verschiedensten Bereichen eingesetzt und auf die Bedürfnisse des Anwenders abgestimmt werden. Der ergonomische und robuste Kamerakopf ist autoklavierbar und ist zudem mit vier individuell programmierbaren Tasten ausgestattet.

LICHTQUELLE

Die hohe Leuchtkraft der langlebigen LED-Lichtquelle ist vergleichbar mit einer Xenon 300 Watt. Sie besitzt einen drehbaren Adapter für vier verschiedene Lichtleitkabel (Tekno [Wolf]/Storz/Olympus/ACMI). Dies hat den großen Vorteil, dass bereits vorhandene Lichtleitkabel nicht getauscht bzw. gewechselt werden müssen.

ARCHIVIERUNGSSYSTEM

Zur Komplettierung des Multifunktionaltalents TeknoCam 3700 HD ist auch ein Archivierungssystem vorhanden, das es dem Anwender erlaubt bis zu zwei HD-Videosignale gleichzeitig aufzunehmen. Ebenso besteht auch die Möglichkeit Bilder während des Eingriffes zu erstellen.

Optional kann das Gerät in verschiedene Netzwerke (beispielsweise DICOM / HL7) integriert werden, womit der Import, wie auch der Export von Daten durchgeführt werden kann.

Die TeknoCam 3700 HD verfügt neben verschiedenen Videoausgängen noch über weitere Anschlüsse wie z.B. einen Druckerausgang oder die Möglichkeit einen Fußschalter anzuschließen um Bilder oder Videos zu erstellen.

The TeknoCam 3700 HD combines three high-grade units for professional use in one compact housing. The camera convinces by its brilliant and sharp HD picture, completed by the excellent illuminating power of the LED light-source and the possibility of saving and storing pictures and videos in HD quality.

This makes the TeknoCam 3700 HD to a multi talent with high functionality to be used in various disciplines. The built-in touch-screen offers a quick, simple and intuitive command of the different functions. In addition, all functions may be controlled by an optional tablet-PC.

CAMERA / CAMERA-HEAD

The control unit offers the possibility to connect two different camera-heads (3 CMOS HD / 1 CMOS HD), both generating a full-HD (1080p) picture with a 16:9 ratio. This makes the TeknoCam 3700 HD suitable for several disciplines and adjustable according to the surgeon's specific needs. The ergonomic and robust camera-head is autoclavable and provides four individually programmable buttons.

LIGHTSOURCE

The high illumination power of the durable LED light-source is comparable to a Xenon 300 Watt. It provides a rotatable adapter for four different cold-light cables (Tekno [Wolf]/Storz/Olympus/ACMI), offering the advantage of using already existing light guides.

DATA STORAGE SYSTEM

The incorporated data storage system completes the multi-functional TeknoCam 3700 HD. It offers the possibility of saving two HD-video-signals at a time. Photos can also be taken during an intervention.

Optionally the device can be integrated into various networks (for example DICOM / HL7), making the import as well as the export of data possible.

Beside various video-outputs, the TeknoCam 3700 HD also provides several outputs, e.g. to connect a printer or a foot-switch for starting video-takes or photos

TEKNO CAM 3700 HD - KOMPAKTEINHEIT

TEKNO CAM 3700 HD - COMPACT UNIT



tk 754-2805-009

Netzwerkschnittstelle (DICOM / HL7)
Network interface (DICOM / HL7)

TEKNO CAM 3700 HD

tk 754-2805-000

mit Lichtquelle und Archivierung
with light source and capture system



3 CMOS	tk 754-2805-001
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1 CMOS	tk 754-2805-002
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HD Kamerakopf, autoklavierbar
HD camera head, autoclavable



Tablet	tk 754-2805-010
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f = 16-34 mm	tk 754-3910°
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Zoomobjektiv, autoklavierbar
Zoom objective, autoclavable



f = 15-35 mm	tk 754-3908
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ISO-Focal Zoom, einlegbar
ISO-Focal zoom, soakable

TECHNISCHE DATEN

TECHNICAL DATA

KAMERA

Sensor: 1/3" 3CMOS
Bildpunkte: 1920 x 1080p (FULL HD)
TV-Auflösung: > 1000 Linien
Bildformat: 16 : 9
Lichtempfindlichkeit: 1,5 lux
Signal-Rauschabstand: 58 dB
Digitale Videoausgänge: 1x DVI-D / 2x 3G HD-SDI
Sonstige Ausgänge: 2x Peripherie / 1x Netzwerk
Eingänge: 1x Fußschalter / 1x Tablet / 1x Mikrofon

Sterilisierbarer C-Mount Kamerakopf: Autoklav und Sterrad
4 belegbare Fernbedienknöpfe am Kamerakopf
Speicherung von Benutzereinstellungen
Digital Zoom (2x), in 20 Stufen regelbar
Simultane Aufnahme von zwei Videoquellen

Abmessungen Kontrolleinheit (B x H x T): ca. 40 x 12 x 34 cm
Gewicht Kontrolleinheit: ca. 8.2 kg
Abmessungen Kamerakopf (B x H x T): 8 x 4 x 5 cm
Gewicht Kamerakopf (B x H x T): ca. 0.53 kg

LICHTQUELLE:

Farbtemperatur: 5.700 °K
Lebensdauer: > 30.000h
Lichtleiteranschluss: TEKNO [Wolf] / Storz / Olympus / ACMI
Lichtintensitätsregelung: 0 - 100% einstellbar

ARCHIVIERUNGSSYSTEM:

Daten Ausgänge: 1x USB (Vorderseite) / 3x USB (Rückseite)
Bildauflösung: 1080p JPG
Videoformate: H.264 Encoding
Speicherkapazität (HDD): 256 GB (ca. 70 Stunden)
Fernsteuerung: Kamerakopf oder Fußschalter

DICOM / HL7 (Optional - tk 754-2805-009):
Import / Export von Daten

Netzspannung: 100 - 240 VAC; 50 - 60 Hz
Leistungsaufnahme: 400 VA
Klassifizierung / Typ: 1 / BF
Hergestellt und geprüft nach: IEC 60601-1 Ed. 3.1: 2012
CE-Kennzeichnung entsprechend: RL 93/42/EWG

CAMERA

Sensor: 1/3" 3CMOS
Pixel: 1920 x 1080p (FULL HD)
Resolution: > 1000 lines
Picture format: 16 : 9
Sensitivity: 1.5 lux
Signal noise ratio: 58 dB
Digital video outputs: 1x DVI-D / 2x 3G HD-SDI
Others outputs: 2x Peripherals / 1x Network
Inputs: 1x Footswitch / 1x Tablet / 1x Microphone

Sterilization C-Mount camera head: Autoclave and Sterrad
4 preselectable remote buttons on camera head
Memories to adjust and store applications
Digital zoom (2x), adjustable in 20 steps
Dual channel to record two video signals simultaneously

Dimensions CCU (W x H x D): approx. 40 x 12 x 34 cm
Weight CCU: approx. 8.2 kg
Dimensions camera head (L x W x H): 8 x 4 x 5 cm
Weight camera head with cable: Approx. 0.53 kg

LIGHT SOURCE:

Color temperature: 5.700 °K
Working life: > 30.000h
Light guide adapter: TEKNO [Wolf] / Storz / Olympus / ACMI
Intensity control: 0 - 100% adjustable

CAPTURE DEVICE:

Data outputs: 1x USB (Front) / 3x USB (Rear)
Image resolution: 1080p JPG
Video format: H.264 Encoding
Recording time (HDD): 256 GB (approx. 70 hours)
Remote control: by footswitch or camera head

DICOM / HL7 (Optional - tk 754-2805-009):
Import / Export of data

Line voltage: 100 - 240 VAC; 50 - 60 Hz
Power consumption: 400 VA
Classification / Type: 1 / BF
Produced and tested acc. to : IEC 60601-1 Ed. 3.1: 2012
CE Marking acc. to: MDD 93/42/EEC

Insufflatoren
Insufflators

Insufflateurs
Insufladores
Insufflatori

Recommended for: LAPAROSCOPY



ON SCREEN DISPLAY *



TEKNO FLOW 15S	15 l/min	tk 754-1509	tk 754-1509H
TEKNO FLOW 20S	20 l/min	tk 754-1512	tk 754-1512H
TEKNO FLOW 30S	30 l/min	tk 754-1522	tk 754-1522H
TEKNO FLOW 45S	45 l/min	tk 754-1532	tk 754-1532H

max. Gasflußrate
max. gas flow

ohne CO₂ Heizung
without CO₂ heater

mit CO₂ Heizung
with CO₂ heater

Insufflatoren aus der TEKNO FLOW S Serie sind sehr solide und zuverlässig und entsprechen dem neuesten Stand der Technik.

Intuitive Bedienbarkeit, sowie gut ablesbare Anzeigen zeichnen diese Geräte aus. Neben der Versorgung durch Flaschengas ist auch der Betrieb über eine zentrale Gasversorgung möglich.

Die Geräte verfügen über ein spezielles Programm für die Pre-Insufflation, welches mit geringem Insufflationsdruck in Verbindung mit hohem Gasfluss arbeitet. Durch die kontinuierliche Drucküberwachung wird ein Höchstmaß an Patientensicherheit gewährleistet.

Optional sind die Insufflatoren mit einem Heizsystem erhältlich. Zusätzlich verfügen die Geräte über eine Differenzdruckanzeige und ein optionales Modul zum Einblenden der Insufflationsdaten in das Monitorbild *(nur in Verbindung mit ausgewählten TEKNO Kameras möglich).

TEKNO FLOW S insufflators series are very solid, reliable and incorporate the state of art technology.

Intuitive operation and easy to read indicators are characteristics of these insufflators. Besides working with gas cylinders the operation is also possible with a central gas supply.

A special program for pre-insufflation, which works with low inflation, combined with high gas flow, insurance works by continuous monitoring of the pressure. Offering a maximum of patient security.

*The insufflators are optionally available with a heating system. In addition, the device has a differential pressure indicator and an optional module to show inflation data on the monitor *(only possible in combination with selected TEKNO cameras).*



Bei Bestellung bitte CO₂-Anschluss angeben! PIN INDEX (F/UK/NL) DIN (D/PL/E/JAP/GR) ISO 5145 (ITALY)
When ordering, please specify CO₂ connection! PIN INDEX (F/UK/NL) DIN (D/PL/E/JAP/GR) ISO 5145 (ITALY)



Insufflatoren
Insufflators

Insufflateurs
Insufladores
Insufflatori

Technische Daten

• Durchfluss	15 / 20 / 30 / 45 l/min
• Druck	1 - 30 mmHg (max. 50 mmHg)
• Netzspannung	100 - 240 VAC; 50-60 Hz
• Leistungsaufnahme	25 - 40W (ohne Heizung) 25 - 105W (mit Heizung)
• Abmessungen (B x H x T)	355 x 105 x 285 mm
• Gewicht	ca. 6,5 kg
• Hergestellt und geprüft nach	IEC 60601-1
• CE-Kennzeichnung entsprechend	RL 93/42/EWG

Im Lieferumfang enthalten

- 1 Sterilfilter
- Schlüsselsatz für CO₂ Flasche
- 2 Insufflationsschläuche 2,5m
- Hochdruckschlauch 1m
- CO₂ Heizung (nur bei Geräten mit Heizung)

Einblenden der Insufflatorsdaten auf dem Monitor nur in Verbindung mit ausgewählten TEKNO Kameras möglich.

Technical data

• Flow	15 / 20 / 30 / 45 l/min
• Pressure	1 - 30 mmHg (max. 50 mmHg)
• Line voltage	100 - 240 VAC; 50-60 Hz
• Power consumption	25 - 40W (w/o heater) 25 - 105W (with heater)
• Dimensions (W x H x D)	355 x 105 x 285 mm
• Weight	approx. 6.5 kg
• Produced and tested acc. to	IEC 60601-1
• CE marking acc. to	RL 93/42/EC

Included in delivery

- 1 sterile filter
- spanner set for CO₂ bottle
- 2 insufflation tubes 2.5 m
- high pressure tube 1 m
- CO₂ heater (only for units with heater)

On screen display of actual flow only possible in combination with selected TEKNO cameras

Zubehör
Accessories

Accessoires
Accesorios
Accessori



50	tk 754-1501
Verpackungseinheit (Stk.) Packing unit (pcs.)	Sterilfilter für TEKNO FLOW Sterile filter for TEKNO FLOW



DIN	ISO 5145	PIN INDEX
tk 754-1506	tk 754-1507	tk 754-1508

Hochdruckschlauch, 1m
High pressure tube, 1m



tk 754-1505

Schlauchsatz, 2,5m - 50 x autoklavierbar bei 134 °C
Tubing set, 2.5m - 50 x autoclavable at 134 °C



tk 751-1020

Gasflasche, leer 0,75 kg (DIN Anschluss)
CO₂ bottle, empty 0.75 kg (DIN connection)



tk 754-1525

CO₂ - Heizung für Insufflationsschlauch für Geräte Seite 6 & 8
CO₂ - heater for insufflation tube connector for units page 6 & 8



tk 754-1527

Schlauch für Insufflatorheizung tk 754-1525
Tube for insufflator heating tk 754-1525

Glasfaser-Kaltlichtkabel
Fiberoptic cables

Cables de lumière froide
 Cables de fibra óptica
 Cavi luce in fibra ottica

autoclavable
 134°C / 273°F



			Xenon / LED	Xenon (TEKNO/Storz)	LED (TEKNO-Wolf)
< Ø 5mm	Ø 3.5 mm	1800 mm	tk 39522-18	tk 39532-18	tk 39560-18
	Ø 3.5 mm	2300 mm	tk 39522-23	tk 39532-23	tk 39560-23
	Ø 3.5 mm	3000 mm	tk 39522-30	tk 39532-30	tk 39560-30
≥ Ø 5mm	Ø 4.8 mm	1800 mm	tk 39523-18	tk 39533-18	tk 39561-18
	Ø 4.8 mm	2300 mm	tk 39523-23	tk 39533-23	tk 39561-23
	Ø 4.8 mm	3000 mm	tk 39523-30	tk 39533-30	tk 39561-30
für Optiken for scopes	Faserbündel Fiber bundle	Länge Length	Kabel ohne Adapter Cable without adapters	komplett mit 2 Adaptern complete with 2 adapters	

- Speziell für XENON & LED-Lichtquellen

Unsere Hochleistungs-Kaltlichtkabel werden durch ein Spezialverfahren am Lichteintritt komprimiert und können so mehr Licht transportieren. Sie sind speziell für hochenergetische Xenon & LED-Lichtquellen geeignet!

- adaptierbar an alle gängigen Systeme mittels Adapter

- Especially for XENON & LED light sources

Our high density fiber optic cables are specially prepared at the light entrance for transporting more light. They are suited for high energy XENON & LED light sources.

- suitable for all common systems with adapter

Saug- Spülpumpen Suction- Irrigation units

Pompes d'aspiration et irrigation
Bombas de irrigación y aspiración
Pompe d'irrigazione e lavaggio

Recommended for: LAPAROSCOPY



MULTI PUMP

tk 750-5060

Eine effektive Doppelrollenpumpe für die Laparoskopie. Die Spül- wie auch die Saugleistung können direkt am Handinstrument durch den Operateur stufenlos und bedarfsgerecht mit zwei Drucktasten eingestellt werden, alternativ mit einem pneumatischen Doppelfußschalter.

Das Steuerungskonzept des Pumpsystems macht den Verzicht auf mechanisch anfällige und in der Reinigung aufwendige Trompetenventile möglich.

An effective double roller pump for laparoscopies. Irrigation and suction can be adjusted directly on the hand instrument by the surgeon and continuously as needed with two buttons, alternatively can be also with a pneumatic double foot pedal switch.

The control concept of the pump system, avoids the use of trumpet valves systems, prone to breakage and with complicated cleaning systems.

Technische Daten

- Saugleistung 0 - 2.500 ml/min
- Spülleistung 0 - 2.500 ml/min
- Max. Pumpendruck 0 - 500 mmHg
- Netzspannung 100 - 240 VAC; 50-60 Hz
- Leistungsaufnahme 36W
- Abmessungen (B x H x T) 304 x 115 x 345 mm
- Gewicht ca. 7 kg
- Hergestellt und geprüft nach IEC 60601-1
- CE-Kennzeichnung entsprechend RL 93/42/EWG

Im Lieferumfang enthalten

- Silikonschlauchsatz, komplett, unsteril, autoklavierbar (tk 750-5061)
- Kanüle, 5 mm, autoklavierbar (tk 750-5065)
- Kanüle, 10 mm, autoklavierbar (tk 750-5066)
- Adapterrohr, unsteril, autoklavierbar (tk 750-5064)
- Handsteuerung pneumatisch (tk 750-5062)
- Steuerungsschlauch, autoklavierbar (tk 750-5063)

Technical data

- Suction 0 - 2.500 ml/min
- Irrigation 0 - 2.500 ml/min
- Max. pressure 0 - 500 mm Hg
- Line voltage 100 - 240 VAC; 50-60 Hz
- Power consumption 36W
- Dimensions (W x H x D) 304 x 115 x 345 mm
- Weight approx. 7 kg
- Produced and tested acc. to IEC 60601-1
- CE marking acc. to RL 93/42/EWG

Included in delivery

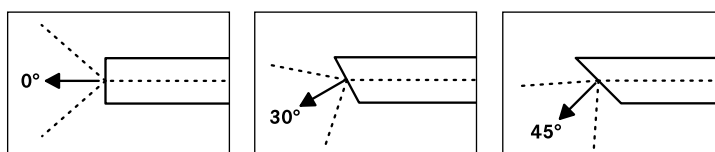
- Silicone tube set, complete, not sterile, autoclavable (tk 750-5061)
- Canula, 5 mm, autoclavable (tk 750-5065)
- Canula, 10 mm, autoclavable (tk 750-5066)
- Adaptor tube, not sterile, autoclavable (tk 750-5064)
- Hand control pneumatic (tk 750-5062)
- Control tube, autoclavable (tk 750-5063)



Zubehör siehe Seite 55-56
Accessories see page 55-56

Laparoskope
Laparoscopes

Laparoscopes
Laparoscopios
Laparoscopi

autoklavierbar / autoclavable
134°C / 273°F - 18 min.


Ø 5.0 mm - 240 mm	tk 700-001	tk 700-011	-
Ø 5.0 mm - 300 mm	tk 700-000	tk 700-003	tk 700-004
Ø 5.0 mm - 360 mm	tk 700-002	tk 700-012	-
Ø 10.0 mm - 310 mm	tk 700-020	tk 700-023	tk 700-024
Ø 10.0 mm - 450 mm	tk 700-420	tk 700-423	tk 700-424
Ø 10.0 mm - 540 mm	tk 700-430	tk 700-433	-

FULL SCREEN

Ø 5.5 mm - 310 mm	tk 700-450	tk 700-453	-
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ULTRA SHARP

Ø 5.5 mm - 300 mm	tk 700-300	tk 700-301	tk 700-302
Ø 10.0 mm - 330 mm	tk 700-028	tk 700-029	-
Ø 10.0 mm - 450 mm	tk 700-310	tk 700-311	tk 700-312

Ø, Arbeitslänge

Ø, Working length

Ø, Longueur de travail

Ø, Longitud de trabajo

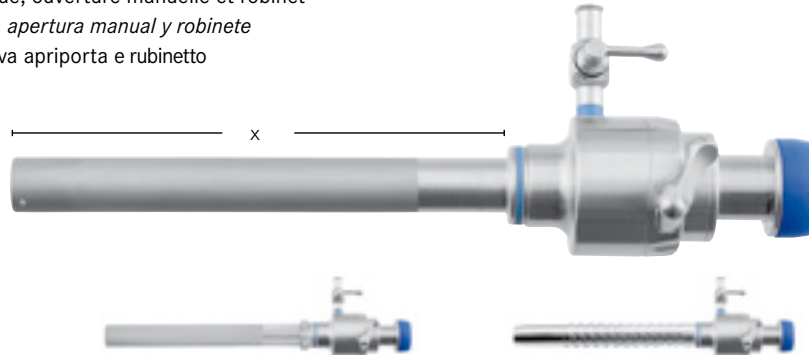
Ø, Lunghezza operativa

Trokare
Trocars

Trocarts
Trócares
Trocars

Trokarhülse mit Automatik-Ventil, manueller Klappenöffnung und Hahn
Trocar sheath with multifunctional valve and stopcock

Gaine de trocart avec valve automatique, ouverture manuelle et robinet
Vaina de trocar con valvula automatica, apertura manual y robinete
Camicia con valvola automatica con leva apriporta e rubinetto



SLIM SL

Ø 5.5 mm	○	x = 103 mm	tk 704-360	tk 704-670
Ø 11.0 mm	●	x = 105 mm	tk 704-365	tk 704-673
Ø 13.0 mm	●	x = 102 mm	tk 704-295	tk 704-676

Metallrohr, glatt
Metal tube, smooth
Tube metalique, lisse
Tubo de metal, lisa
Tubo metallico, liscio

Metallrohr mit Gewinde
Metal tube, threaded
Tube metalique avec filetage
Tubo de metal con rosca
Tubo metallico con filetto



SLIM SL

Ø 5.5 mm	○	x = 95 mm	tk 704-671	tk 704-672
Ø 11.0 mm	●	x = 97 mm	tk 704-674	tk 704-675
Ø 13.0 mm	●	x = 94 mm	tk 704-677	tk 704-678

Kunststoffrohr, glatt
Plastic tube, smooth
Tube plastique, lisse
Tubo plastico, lisa
Tubo di plastica, liscia

Kunststoffrohr mit Gewinde
Plastic tube, threaded
Tube plastique avec filetage
Tubo de plastico con rosca
Tubo di plastica con filetto



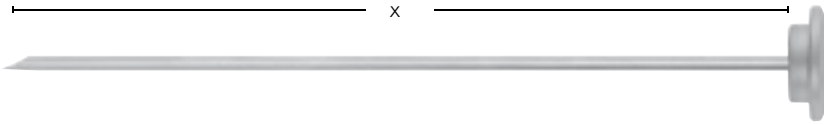
SLIM SL-XL

Ø 5.5 mm	○	x = 150 mm	tk 704-4002-15
Ø 11.0 mm	●	x = 150 mm	tk 704-4010-15
Ø 13.0 mm	●	x = 150 mm	tk 704-4012-15

Metallrohr, glatt
Metal tube, smooth
Tube metalique, lisse
Tubo de metal, lisa
Tubo metallico, liscio

Trokare
Trocars

Trocarts
Trócares
Trocars



Ø 2.8 mm	x = 108 mm	x = 148 mm
	tk 730-171	tk 730-161
	tk 730-172	tk 730-162

für tk 730-170
for tk 730-170
pour tk 730-170
para tk 730-170
per tk 730-170

für tk 730-160
for tk 730-160
pour tk 730-160
para tk 730-160
per tk 730-160



Ø 3.5 mm	CL	tk 704-070	tk 730-220	tk 704-072
Ø 5.5 mm	CL SL WL	tk 704-016	tk 704-022	tk 704-031
Ø 7.0 mm	CL	tk 704-014	tk 704-018	-
Ø 10.0 mm		-	-	tk 704-033
Ø 11.0 mm	CL SL WL	tk 704-006	tk 704-026	tk 704-035
Ø 12.5 mm		-	-	tk 704-036
Ø 13.0 mm	SL	tk 704-093	tk 704-092	-
Ø 15.0 mm	CL	tk 704-015	tk 704-028	-
Ø 20.0 mm	CL	tk 704-020	tk 704-029	-

Ø 5.5 mm	SL-XL	tk 704-016-15	tk 704-022-15	-
Ø 11.0 mm	SL-XL	tk 704-006-15	tk 704-026-15	-
Ø 13.0 mm	SL-XL	tk 704-012-15	tk 704-027-15	-

Für Trokar-System
For trocar system
Pour système trocar
Para el sistema de trócares
Sistema per trocar

Trokar (dreikant)
Trocar (pyramidal)
Trocart (pyramidal)
Trócar (piramidal)
Trocars (piramidale)

Trokar (Kegelform)
Trocar (conical tip)
Trocart (conique)
Trócar (conico)
Trocars (conico)

Trokar (stumpf)
Trocar (blunt)
Trocart (mousse)
Trócar (romo)
Trocars (smusso)

Zubehör für Trokare
Accessories for trocars

Accessoires pour trocars
Accesorios para trócares
Accessorio per trocar



	35.0 mm
Ø 5.5 mm	tk 704-436
Ø 10.0 mm	tk 704-437
Ø 11.0 mm	tk 704-438
Ø 12.5 mm	tk 704-439
Ø 13.0 mm	tk 704-440

Ø Trokar Abstandshalter mit Fixiergewinde
Ø Trocar Distance holder with fixation thread
Ø Trocart Pièce de distance avec vis de fixation
Ø Trócar Pieza de distancia con tornillo de fijación
Ø Trocar Distanziatore con vite di fissaggio



Ø 5.5 mm	Ø 3.0 mm	tk 704-233
Ø 10.0 mm	Ø 5.5 mm	tk 704-240
Ø 11.0 mm	Ø 5.5 mm	tk 704-241
Ø 12.5 mm	Ø 5.5 mm	tk 704-242
Ø 12.5 mm	Ø 10.0 mm	tk 704-243
Ø 13.0 mm	Ø 5.5 mm	tk 704-244
Ø 13.0 mm	Ø 10.0 mm	tk 704-245

Ø Trokar Reduzieraufsatz mit Silikonhalterung
Ø Trocar Reduction adaptors with silicon-holder
Ø Trocart Réducteur avec support de silicon
Ø Trócar Reductor con soporte de silicona
Ø Trocar Riduttore con supporto in silicone



Ø 5.0 mm	Ø 4.0 mm	tk 704-200
Ø 11.0/10.0 mm	Ø 5.5 mm	tk 704-000
Ø 12.5 mm	Ø 5.5 mm	tk 704-216
Ø 15.0 mm	Ø 5.5 mm	tk 704-203
Ø 12.5 mm	Ø 10.0 mm	tk 704-217
Ø 15.0 mm	Ø 10.0 mm	tk 704-204
Ø 20.0 mm	Ø 10.0 mm	tk 704-207
Ø 20.0 mm	Ø 15.0 mm	tk 704-218

Ø Trokar Reduzierhülsen
Ø Trocar Reduction sleeves
Ø Trocart Gaine de réduction
Ø Trócar Vaina para reducción
Ø Trocar Riduttore

Zubehör für Trokare
Accessories for trocars

Accessoires pour trocars
 Accesorios para trócares
 Accessorio per trocar



Ø 3.5 mm	tk 704-395 K
Ø 5.5 mm	tk 704-397 K
Ø 10.0 mm	tk 704-398 K
Ø 11.0 mm	tk 704-399 K
Ø 12.5 mm	tk 704-389 K
Ø 13.0 mm	tk 704-390 K

Ø Trokar	Hassonkonus fixierbar mit Fadenhaltern
Ø Trocar	Hassoncone fixable with suture holder
Ø Trocart	Conus de Hasson à fixer, avec porte-fils
Ø Trócar	Cono de Hasson fijable, con porta suturas
Ø Trocar	Cono di Hasson con levette porta sutura



Ø 3.5 mm	tk 704-0022	●
Ø 5.5 mm	tk 704-0023	●
Ø 10.0 mm	tk 704-0024	●
Ø 11.0 mm	tk 704-0025	●
Ø 12.5 mm	tk 704-0026	●
Ø 13.0 mm	tk 704-0027	●

Ø Trokar	Dichtkappe (Farbe), Pack mit 10 Stück
Ø Trocar	Sealing cap (colour), pack of 10 pieces
Ø Trocart	Capuchon (couleur), paquet de 10 pièces
Ø Trócar	Capuchón (color), paquetes de 10 piezas
Ø Trocar	Cappuccio (colore), conf. da 10 pezzi

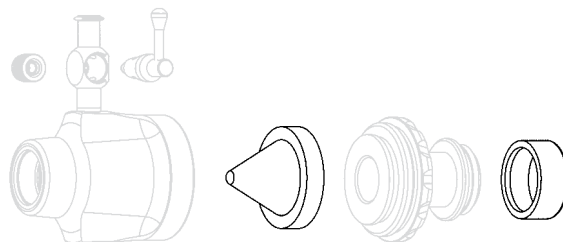


Ø 10.0 mm	Ø 5.5 mm	tk 704-235
Ø 11.0 mm	Ø 5.5 mm	
Ø 11.0 mm	Ø 10.0 mm	
Ø 12.5 mm	Ø 5.5 mm	
Ø 13.0 mm	Ø 5.5 mm	
Ø 12.5 mm	Ø 10.0 mm	tk 704-238
Ø 13.0 mm	Ø 10.0 mm	

Ø Trokar	Schiebereduzierer verwendbar für alle TEKNO Automatiktrokarhülsen
Ø Trocar	Reduction piece for all TEKNO automatic trocars
Ø Trocart	Réducteur pour tous les trocars automatiques de TEKNO
Ø Trócar	Reductor para todos trócares automaticos de TEKNO
Ø Trocar	Riduttore per tutti trocar automatici TEKNO

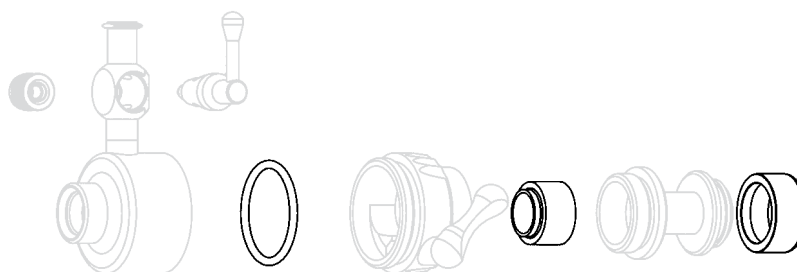
Zubehör für Trokare
Accessories for trocars

Accessoires pour trocars
Accesorios para trócares
Accessorio per trocar



LIGHTWEIGHT LW

Packaging unit		5 Pcs.	10 Pcs.
Ø 5.5 mm	LW	tk 704-0020	tk 704-0004 ○
Ø 11.0 mm	LW	tk 704-0021	tk 704-0008 ●
Ø Trokar	Für Trokar-System	Silikonventil	Dichtkappe (Farbe)
Ø Trocar	For trocar system	Silicone valve	Sealing cap (colour)
Ø Trocart	Pour système trocar	Valve silicon	Capuchon (couleur)
Ø Trócar	Para el sistema de trócares	Valvula silicona	Capuchón (color)
Ø Trocar	Sistema per trocar	Valvola silicone	Cappuccio (colore)



SLIM SL
CLASSIC CL

Packaging unit		1 Pcs.	10 Pcs.	10 Pcs.
Ø 3.5 mm	CL	tk 704-0122	tk 704-0202 ●	tk 704-0002 ●
Ø 5.5 mm	CL	tk 704-0124	tk 704-0200A ●	tk 704-0004A ●
Ø 5.5 mm	SL	tk 704-0123	tk 704-0200 ○	tk 704-0004 ○
Ø 7.0 mm	CL	tk 704-0124	tk 704-0200A ●	tk 704-0006 ●
Ø 11.0 mm	CL	tk 704-0127	tk 704-0201A ●	tk 704-0008 ●
Ø 11.0 mm	SL	tk 704-0124	tk 704-0201 ●	tk 704-0008 ●
Ø 13.0 mm	SL	tk 704-0124	tk 704-0205 ●	tk 704-0010 ●
Ø 15.0 mm	CL	tk 704-0128	tk 704-0204 ●	tk 704-0013 ●
Ø 20.0 mm	CL	tk 704-0129	tk 704-0204 ●	tk 704-0018 ●
Ø Trokar	Für Trokar-System	O-Ring	Innendichtung (Farbe)	Dichtkappe (Farbe)
Ø Trocar	For trocar system	O ring	Inner sealing (colour)	Sealing cap (colour)
Ø Trocart	Pour système trocar	Anneau O	Jointe interne (couleur)	Capuchon (couleur)
Ø Trócar	Para el sistema de trócares	Anillo O	Guarnición interna (color)	Capuchón (color)
Ø Trocar	Sistema per trocar	O Ring	Guarnizione interna (colore)	Cappuccio (colore)

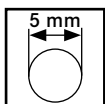
Koagulations-Saugkanülen, monopolar
Coagulation suction tubes, monopolar

Canules á coagulation, monopolaires
 Cánulas para coagulación, monopolares
 Canule per aspirazione, monopolari



	Ø 5.0 mm	330 mm	450 mm
 Spatel <i>Spatula</i> Spatule <i>Espátula</i> Spatola 1:1		tk 706-180	tk 706-180-45
 Rundhaken <i>Hook</i> Crochet <i>Gancho</i> Uncino curvo 1:1		tk 706-182	tk 706-182-45
 Haken 90° <i>Hook 90°</i> Crochet 90° <i>Gancho 90°</i> Uncino 90° 1:1		tk 706-184	tk 706-184-45
 Knopf <i>Ball point</i> Boule <i>Bola</i> Sfera 1:1		tk 706-186	tk 706-186-45
 Nadel <i>Needle</i> Aiguille <i>Aguja</i> Ago 1:1		tk 706-187	tk 706-187-45

Elektrode, Saugkanüle mit Trompetenventil und LL-Ansatz
Electrode, suction tube with trumpet valve and LL-connection
 Électrode, canule avec valve à piston et connecteur LL
 Electrodo, cánula con valvula de trompeta y conexión LL
 Elettrodi, canule per aspirazione con valvola a trombetta, attacco LL



Scheren, zerlegbar
Scissors, detachable

Ciseaux, démontables
Tijeras, desmontables
Forbici, smontabili



ohne Sperre
without ratchet
sans crémaillère
sin cremallera
senza cremagliera

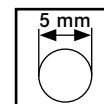
Einsatz allein
Insert only
Insert seul
Inserto solo
Inserto, solo

TEKNO LINE

		Ø 5.0 mm	Ø 5.0 mm
Hakenschere <i>Hook scissors</i>	250 mm	tk 775-4020-25 C	tk 775-4020-25
Ciseaux à crochet	330 mm	tk 775-4020 C	tk 775-4020
<i>Tijera de gancho</i>	450 mm	tk 775-4020-45 C	tk 775-4020-45
Forbici a gancio			
METZENBAUM-Schere <i>METZENBAUM-scissors</i>	250 mm	tk 775-4022-25 C	tk 775-4022-25
METZENBAUM ciseaux	330 mm	tk 775-4022 C	tk 775-4022
<i>METZENBAUM tijera</i>	450 mm	tk 775-4022-45 C	tk 775-4022-45
METZENBAUM forbici			
METZENBAUM-Schere, gebogen <i>METZENBAUM-scissors, curved</i>	250 mm	tk 775-4023-25 C	tk 775-4023-25
METZENBAUM ciseaux, courbes	330 mm	tk 775-4023 C	tk 775-4023
<i>METZENBAUM tijera, curva</i>	450 mm	tk 775-4023-45 C	tk 775-4023-45
METZENBAUM forbici, curve			
Mikroschere <i>Micro scissors</i>	250 mm	tk 775-4024-25 C	tk 775-4024-25
Ciseaux micro	330 mm	tk 775-4024 C	tk 775-4024
<i>Tijera micro</i>	450 mm	tk 775-4024-45 C	tk 775-4024-45
Forbici micro			
Mikroschere, gebogen <i>Micro scissors, curved</i>	250 mm	tk 775-4025-25 C	tk 775-4025-25
Ciseaux micro, courbes	330 mm	tk 775-4025 C	tk 775-4025
<i>Tijera micro, curva</i>	450 mm	tk 775-4025-45 C	tk 775-4025-45
Forbici micro, curve			
Peritoneal-Schere, 1 Blatt gezahnt <i>Peritoneal scissors, 1 blade serrated</i>	250 mm	tk 775-4026-25 C	tk 775-4026-25
Ciseaux péritonéales, une lame crantée	330 mm	tk 775-4026 C	tk 775-4026
<i>Tijera peritoneal, una hoja dentada</i>	450 mm	tk 775-4026-45 C	tk 775-4026-45
Forbici paritoneale, 1 lama dentellata			
METZENBAUM-Schere, gebogen, lang <i>METZENBAUM-scissors, curved, long</i>	250 mm	tk 775-4027-25 C	tk 775-4027-25
METZENBAUM ciseaux, courbes, longue	330 mm	tk 775-4027 C	tk 775-4027
<i>METZENBAUM tijera, curva, larga</i>	450 mm	tk 775-4027-45 C	tk 775-4027-45
METZENBAUM forbici, curve, lama lunga			
OP-Schere <i>OP-scissors</i>	250 mm	tk 775-3928-25 C	tk 775-3928-25
Ciseaux à opérations	330 mm	tk 775-3928 C	tk 775-3928
<i>Tijera para operaciones</i>	450 mm	tk 775-3928-45 C	tk 775-3928-45
Forbici per operazione			
OP-Schere, gebogen <i>OP-scissors, curved</i>	250 mm	tk 775-3929-25 C	tk 775-3929-25
Ciseaux à opérations, courbes	330 mm	tk 775-3929 C	tk 775-3929
<i>Tijera para operaciones, curva</i>	450 mm	tk 775-3929-45 C	tk 775-3929-45
Forbici per operazione, curve			

Biopsiezangen, zerlegbar
Biopsy forceps, detachable

Pinces à biopsie, démontables
Pinzas de biopsia, desmontables
Pinze per biopsia, smontabili



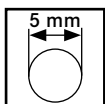
ohne Sperre
without ratchet
sans crémaillère
sin cremallera
senza cremagliera

mit Sperre
with ratchet
avec crémaillère
con cremallera
con cremagliera

Einsatz allein
Insert only
Insert seul
Inserto solo
Inserto, solo

TEKNO LINE

			Ø 5.0 mm	Ø 5.0 mm	Ø 5.0 mm
 1:1	Biopsie Stanze Biopsy forceps Pince à biopsie <i>Pinza de biopsia</i> Pinze per biopsia	250 mm 330 mm 450 mm	tk 775-4030-25 C tk 775-4030 C tk 775-4030-45 C	tk 775-4030-25 CS tk 775-4030 CS tk 775-4030-45 CS	tk 775-4030-25 tk 775-4030 tk 775-4030-45
	Biopsie Stanze, gerieft mit Zahn Biopsy forceps, serrated with tooth Pince à biopsie, striée, avec dent <i>Pinza de biopsia, estriada, con diente</i> Pinze per biopsia dentellata, con dente	250 mm 330 mm 450 mm	tk 775-4031-25 C tk 775-4031 C tk 775-4031-45 C	tk 775-4031-25 CS tk 775-4031 CS tk 775-4031-45 CS	tk 775-4031-25 tk 775-4031 tk 775-4031-45
	Biopsie Stanze, durchschneidend Biopsy forceps, through cutting Pince à biopsie, coupante <i>Pinza de biopsia, cortante</i> Pinze per biopsia, tagliente	250 mm 330 mm 450 mm	tk 775-4034-25 C tk 775-4034 C tk 775-4034-45 C	tk 775-4034-25 CS tk 775-4034 CS tk 775-4034-45 CS	tk 775-4034-25 tk 775-4034 tk 775-4034-45
	Biopsie Stanze Biopsy forceps Pince à biopsie <i>Pinza de biopsia</i> Pinze per biopsia	250 mm 330 mm 450 mm	tk 775-4033-25 C tk 775-4033 C tk 775-4033-45 C	tk 775-4033-25 CS tk 775-4033 CS tk 775-4033-45 CS	tk 775-4033-25 tk 775-4033 tk 775-4033-45
 1:1	Biopsie Stanze mit Zahn Biopsy forceps with tooth Pince à biopsie, avec dent <i>Pinza de biopsia, con diente</i> Pinze per biopsia, con dente	250 mm 330 mm 450 mm	tk 775-4032-25 C tk 775-4032 C tk 775-4032-45 C	tk 775-4032-25 CS tk 775-4032 CS tk 775-4032-45 CS	tk 775-4032-25 tk 775-4032 tk 775-4032-45
	Löffelzange Spoon-forceps Pince à cuillère <i>Pinza de cuchara</i> Pinza a cucchiaio	250 mm 330 mm 450 mm	tk 775-4245-25 C tk 775-4245 C tk 775-4245-45 C	tk 775-4245-25 CS tk 775-4245 CS tk 775-4245-45 CS	tk 775-4245-25 tk 775-4245 tk 775-4245-45
	Alligator-Biopsie-Fasszange Alligator-biopsy-forceps Pince à biopsie, crocodile <i>Pinza de biopsia, cocodrilo</i> Morso alligatore	250 mm 330 mm 450 mm	tk 775-4066-25 C tk 775-4066 C tk 775-4066-45 C	tk 775-4066-25 CS tk 775-4066 CS tk 775-4066-45 CS	tk 775-4066-25 tk 775-4066 tk 775-4066-45



Fasszangen, zerlegbar
Grasping forceps, detachable

Pincès à saisir, démontables
Pinzas de agarre, desmontables
Pinze da presa, smontabili

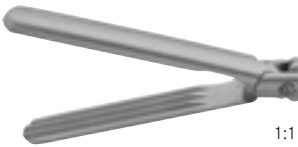
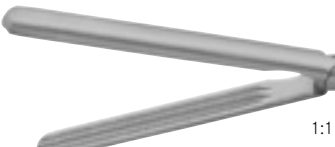
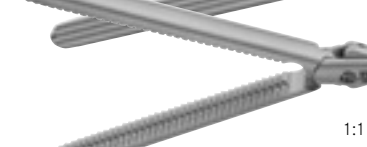


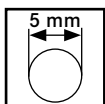
ohne Sperre
without ratchet
sans crémaillère
sin cremallera
senza cremagliera

mit Sperre
with ratchet
avec crémaillère
con cremallera
con cremagliera

Einsatz allein
Insert only
Insert seul
Inserto solo
Inserto, solo

TEKNOLINE

		Ø 5.0 mm	Ø 5.0 mm	Ø 5.0 mm
	DEBAKEY, atraumatisch, 20 mm lang DEBAKEY, atraumatic, 20mm jaw length	250 mm	tk 775-4099-25 C	tk 775-4099-25 CS
	DEBAKEY, atraumatique, 20 mm	330 mm	tk 775-4099 C	tk 775-4099 CS
	DEBAKEY, atraumatica, 20 mm	450 mm	tk 775-4099-45 C	tk 775-4099-45 CS
	DEBAKEY atraumatica, morso lungo 20 mm			tk 775-4099-45
	DEBAKEY, atraumatisch, 30 mm lang DEBAKEY, atraumatic, 30 mm jaw length	250 mm	tk 775-4100-25 C	tk 775-4100-25 CS
	DEBAKEY, atraumatique, 30 mm	330 mm	tk 775-4100 C	tk 775-4100 CS
	DEBAKEY, atraumatica, 30 mm	450 mm	tk 775-4100-45 C	tk 775-4100-45 CS
	DEBAKEY atraumatica, morso lungo 30 mm			tk 775-4100-45
	DEBAKEY, atraumatisch, 40 mm lang DEBAKEY, atraumatic, 40 mm jaw length	250 mm	tk 775-4101-25 C	tk 775-4101-25 CS
	DEBAKEY, atraumatique, 40 mm	330 mm	tk 775-4101 C	tk 775-4101 CS
	DEBAKEY, atraumatica, 40 mm	450 mm	tk 775-4101-45 C	tk 775-4101-45 CS
	DEBAKEY atraumatica, morso lungo 40 mm			tk 775-4101-45
	DEBAKEY, atraumatisch, 50 mm lang DEBAKEY, atraumatic, 50 mm jaw length	250 mm	tk 775-4249-25 C	tk 775-4249-25 CS
	DEBAKEY, atraumatique, 50 mm	330 mm	tk 775-4249 C	tk 775-4249 CS
	DEBAKEY, atraumatica, 50 mm	450 mm	tk 775-4249-45 C	tk 775-4249-45 CS
	DEBAKEY atraumatica, morso lungo 50 mm			tk 775-4249-45
	KOCHER, längs gerieft, 40 mm lang KOCHER, lengthwise serrated, 40 mm length	250 mm	tk 775-4236-25 C	tk 775-4236-25 CS
	KOCHER, strié le long du mors, 40mm	330 mm	tk 775-4236 C	tk 775-4236 CS
	KOCHER, estriada lo larga de la boca, 40mm	450 mm	tk 775-4236-45 C	tk 775-4236-45 CS
	KOCHER, zigrinatura longitudinale, 40 mm			tk 775-4236-45
	KOCHER, längs gerieft, 60 mm lang KOCHER, lengthwise serrated, 60 mm length	250 mm	tk 775-4235-25 C	tk 775-4235-25 CS
	KOCHER, strié le long du mors, 60mm	330 mm	tk 775-4235 C	tk 775-4235 CS
	KOCHER, estriada lo larga de la boca, 60mm	450 mm	tk 775-4235-45 C	tk 775-4235-45 CS
	KOCHER, zigrinatura longitudinale, 60 mm			tk 775-4235-45
	Starke Fasszange, atraumatisch Strong grasping forceps, atraumatic	250 mm	tk 775-4232-25 C	tk 775-4232-25 CS
	Pince forte, atraumatique	330 mm	tk 775-4232 C	tk 775-4232 CS
	Pinza fuerte, atraumatica	450 mm	tk 775-4232-45 C	tk 775-4232-45 CS
	Pinza da presa molto forte, atraumatica			tk 775-4232-45
	GLASSMANN, Fasszange, atraumatisch GLASSMANN, grasping forceps, atraumatic	250 mm	tk 775-4091-25 C	tk 775-4091-25 CS
	GLASSMANN, atraumatique	330 mm	tk 775-4091 C	tk 775-4091 CS
	GLASSMANN, atraumatica	450 mm	tk 775-4091-45 C	tk 775-4091-45 CS
	GLASSMANN, pinza da presa atraumatica			tk 775-4091-45



Fasszangen, zerlegbar
Grasping forceps, detachable

Pincès à saisir, démontables
Pinzas de agarre, desmontables
Pinze da presa, smontabili



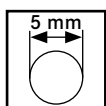
ohne Sperre
without ratchet
sans crémaillère
sin cremallera
senza cremagliera

mit Sperre
with ratchet
avec crémaillère
con cremallera
con cremagliera

Einsatz allein
Insert only
Insert seul
Inserto solo
Inserto, solo

TEKNO LINE

		Ø 5.0 mm	Ø 5.0 mm	Ø 5.0 mm
	Fasszange, atraumatisch, spitz <i>Grasping forceps pointed, atraumatic</i>	250 mm	tk 775-4064-25 C	tk 775-4064-25 CS
	Pince à saisir, atraumatique, pointu	330 mm	tk 775-4064 C	tk 775-4064 CS
	Pinza de agarre, atraumatica, aguda	450 mm	tk 775-4064-45 C	tk 775-4064-45 CS
	Pinza da presa atraumatica, acuta			tk 775-4064-45
	MARYLAND Fasszange, grob gerieft, gebogen <i>MARYLAND coarse serrated, curved</i>	250 mm	tk 775-4069-25 C	tk 775-4069-25 CS
	MARYLAND, strié fort, courbe	330 mm	tk 775-4069 C	tk 775-4069 CS
	MARYLAND, estriada fuerte, curva	450 mm	tk 775-4069-45 C	tk 775-4069-45 CS
	MARYLAND, zigrinatura larga, curva			tk 775-4069-45
	MARYLAND Fasszange, fein gerieft, gebogen <i>MARYLAND grasping forceps, fine serrated</i>	250 mm	tk 775-4021-25 C	tk 775-4021-25 CS
	MARYLAND, strié fin	330 mm	tk 775-4021 C	tk 775-4021 CS
	MARYLAND, estriada fina	450 mm	tk 775-4021-45 C	tk 775-4021-45 CS
	MARYLAND, pinza da presa, zigrinatura fine			tk 775-4021-45
	MARYLAND, kreuzgerieft <i>MARYLAND, cross serrated</i>	250 mm	tk 775-4075-25 C	tk 775-4075-25 CS
	MARYLAND, strié en cruciforme	330 mm	tk 775-4075 C	tk 775-4075 CS
	MARYLAND, estriada en cruciforma	450 mm	tk 775-4075-45 C	tk 775-4075-45 CS
	MARYLAND, zigrinatura a croce			tk 775-4075-45
	MARYLAND, DEBAKEY, gebogen <i>MARYLAND, DEBAKEY, curved</i>	250 mm	tk 775-4088-25 C	tk 775-4088-25 CS
	MARYLAND, DEBAKEY, courbe	330 mm	tk 775-4088 C	tk 775-4088 CS
	MARYLAND, DEBAKEY, curva	450 mm	tk 775-4088-45 C	tk 775-4088-45 CS
	MARYLAND, DEBAKEY, curva			tk 775-4088-45
	MIXTER Fasszange, 45° gewinkelt <i>MIXTER grasping forceps, 45° angled</i>	250 mm	tk 775-4228-25 C	tk 775-4228-25 CS
	MIXTER, 45° angulé	330 mm	tk 775-4228 C	tk 775-4228 CS
	MIXTER, 45° angulada	450 mm	tk 775-4228-45 C	tk 775-4228-45 CS
	MIXTER, pinza da presa angolata a 45°			tk 775-4228-45
	MIXTER Fasszange, 45° gebogen <i>MIXTER grasping forceps, 45° curved</i>	250 mm	tk 775-4222-25 C	tk 775-4222-25 CS
	MIXTER, 45° courbé	330 mm	tk 775-4222 C	tk 775-4222 CS
	MIXTER, 45° curvada	450 mm	tk 775-4222-45 C	tk 775-4222-45 CS
	MIXTER, pinza da presa curva a 45°			tk 775-4222-45



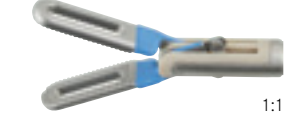
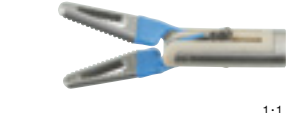
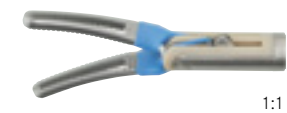
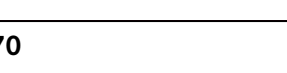
Bipolare Koagulationszange EVO II

Bipolar coagulation forceps EVO II

Pince bipolaire EVO II
Pinza bipolar EVO II
Pinza bipolari, EVO II



250 mm	340 mm	450 mm	
tk 707-131-25	tk 707-131	tk 707-131-45	tk 707-132
Schaft, allein <i>Shaft, only</i>	Schaft, allein <i>Shaft, only</i>	Schaft, allein <i>Shaft, only</i>	Griff, allein <i>Handle, only</i>
Gaine seule <i>Vaina sola</i>	Gaine seule <i>Vaina sola</i>	Gaine seule <i>Vaina sola</i>	Poignée seul <i>Mango solo</i>
Asta, solo	Asta, solo	Asta, solo	Manico, solo

Ø 5.0 mm			
 1:1	MARYLAND Faszange <i>MARYLAND grasping forceps</i>	250 mm 340 mm 450 mm	tk 707-120-25 tk 707-120 tk 707-120-45
 1:1	MARYLAND pince <i>MARYLAND pinza</i>		tk 707-020-25 tk 707-020 tk 707-020-45
 1:1	METZENBAUM Schere, gebogen <i>METZENBAUM scissors, curved</i>	250 mm 340 mm 450 mm	tk 707-121-25 tk 707-121 tk 707-121-45
 1:1	METZENBAUM ciseaux, courbes <i>METZENBAUM tijera, curva</i>		tk 707-021-25 tk 707-021 tk 707-021-45
 1:1	METZENBAUM forbice curva		
 1:1	Faszange, gefenstert <i>Grasping forceps, fenestrated</i>	250 mm 340 mm 450 mm	- tk 707-122 tk 707-122-45
 1:1	Pince à saisir, fenêtrée <i>Pinza de agarre, fenestrada</i>		tk 707-022 tk 707-022-45
 1:1	Pinza da presa, fenestrata		
 1:1	Faszange, gefenstert, spitz <i>Grasping forceps, fenestrated, pointed</i>	250 mm 340 mm 450 mm	- tk 707-123 tk 707-123-45
1:1	Pince à saisir, fenêtrée, pointue <i>Pinza de agarre, fenestrada, aguda</i>		tk 707-023 tk 707-023-45
1:1	Pinza da presa, fenestrata, acuta		
1:1	Faszange, gefenstert, gebogen <i>Grasping forceps, fenestrated, curved</i>	250 mm 340 mm 450 mm	tk 707-124-25 tk 707-124 tk 707-124-45
1:1	Pince à saisir, fenêtrée, courbe <i>Pinza de agarre, fenestrada, curva</i>		tk 707-024-25 tk 707-024 tk 707-024-45
1:1	Pinza da presa, fenestrata, curva		
1:1	Pinzettenspitze <i>Fluted tip</i>	250 mm 340 mm 450 mm	tk 707-125-25 tk 707-125 tk 707-125-45
1:1	Mors fins <i>Boca fina</i>		tk 707-025-25 tk 707-025 tk 707-025-45
1:1	Morso fine		
1:1	Hakenzange <i>Claw forceps</i>	250 mm 340 mm 450 mm	- tk 707-126 tk 707-126-45
1:1	Pince á griffes <i>Pinza de gaucha</i>		tk 707-026 tk 707-026-45
1:1	Pinza a gancio		

Zange, komplett
Forceps, complete
Pince, complète
Pinza, completa
Strumento, completo

Einsatz, allein
Insert, only
Insert, seul
Inserto, solo
Inserto, solo

Monopolare Hochfrequenzkabel
Monopolar high frequency cables

Cables monopolaires
Cables monopolares
Cavi monopolari

autoklavierbar / *autoclavable*
134°C / 273°F

	TEKNO, Berchtold, Martin, Erbe T-series	3 m	tk 707-510	
		5 m	tk 707-511	
	TEKNO, Storz, Erbe, Martin, Berchtold	3 m	tk 707-520	
		5 m	tk 707-521	
	Valleylab	3 m	tk 707-525	
		5 m	tk 707-526	

Geräteseite
Units side
Côté appareil
Lado equipo
Lato apparecchio

Instrumentenseite
Instrument side
Côté instrument
Lado instruments
Lato strumento

Bipolare Instrumentenkabel
Bipolar instrument cables

Cables bipolaires
Cables bipolares
 Cavi bipolari

Hochfrequenzkabel, 3 m
High frequency cable, 3 m
 Câble de haute fréquence, 3 m
Cable alta frecuencia, 3 m
 Cavo ad alta frequenza, 3 m

autoclavable
 134°C / 273°F

	Erbe ICC/ACC, Wisap, Storz	tk 707-330	Flat plug round	
		tk 707-300	Flat plug square	
	Martin, Berchtold	tk 707-331	Flat plug round	
		tk 707-301	Flat plug square	
	TEKNO, Valleylab USA	tk 707-332	Flat plug round	
		tk 707-302	Flat plug square	
	TEKNO, Valleylab Europe	tk 707-333	Flat plug round	
		tk 707-303	Flat plug square	
	TEKNO, 19 mm for TOM 80/100 212/212A/ 412/412A only	tk 707-338	Flat plug round	
Geräteseite <i>Unit side</i>		Instrumentenseite <i>Instrument side</i>		
Côté appareil		Côté instrument		
<i>Lado equipo</i>		<i>Lado instrumento</i>		
Lato elettrobisturi		Lato strumento		



Andere Anschlüsse auf Anfrage lieferbar
Other connectors are available upon request

Autres raccords sont disponibles sur demande
Otras conexiones son disponibles según demanda
 Altri attacchi a richiesta

Reinigungs- und Sterilisationszubehör
Cleaning and sterilizing accessories

Accessoires pour nettoyage et stérilisation
Accesorios para limpieza y esterilización
 Accessori per pulizia e sterilizzazione


tk 707-600

Reinigungspistole komplett mit 9 Adaptern

Cleaning gun complete with 9 adaptors

Pistolet de nettoyage avec 9 adaptateurs

Pistola de limpieza con 9 adaptadores

Pistola per pulire completa di 9 adattatori

	480 mm
Ø 3 mm	tk 707-604
Ø 5 mm	tk 707-605
Ø 10 mm	tk 707-610

für Ø Rohr

for Ø tube

pour Ø tube

para Ø tubos

per Ø tubi

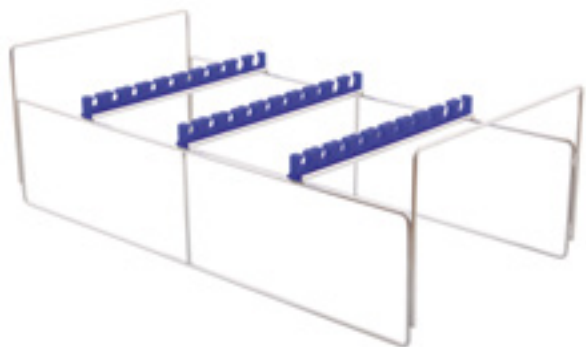
Reinigungsbürste (10 Stück)

Cleaning brush (10 pieces)

Brosse de nettoyage (10 pièces)

Cepillo de limpieza (10 piezas)

Spazzolini (10 pezzi)


tk 87295-00

Halter für Laparoskopie-Instrumente (490 x 235 x 160 mm)

Sterilization tray for laparoscopy instruments (490 x 235 x 160 mm)

Support pour instruments de coelioscopie (490 x 235 x 160 mm)

Soporte para instrumentos de laparoscopia (490 x 235 x 160 mm)

Sostegno per strumenti di laparoscopia (490 x 235 x 160 mm)


tk 87015-20

Siebkorb (510 x 255 x 50 mm) für tk 87295-00

Wire basket (510 x 255 x 50 mm) for tk 87295-00

Panier (510 x 255 x 50 mm) pour tk 87295-00

Cesta (510 x 255 x 50 mm) para tk 87295-00

Cestello (510 x 255 x 50 mm) per tk 87295-00


tk 87200-1F-SI

Container für tk 87295-00

Container for tk 87295-00

Contenaire pour tk 87295-00

Contenedor para tk 87295-00

Container per tk 87295-00

POWERGRIP

Bipolare Koagulationszange
Bipolar Coagulation Forceps



POWERGRIP

Bipolare Koagulationszange
Bipolar Coagulation Forceps

Präziser koagulieren, kräftiger fassen, besser schneiden, genauer arbeiten – mit der Bissinger POWERGRIP

Die Bissinger POWERGRIP ist ein Instrument zum Fassen, Schneiden und bipolaren Koagulieren in der Minimal Invasiven Chirurgie. Sie zeichnet sich durch einen Mechanismus aus, der ein aktives, gut dosierbares Öffnen und Schließen der Mäuler und besonders hohen Druck beim Fassen und Schneiden bei gleichzeitiger präziser Koagulation des Gewebes ermöglicht. Dabei werden die Mäuler über ein Doppelgelenk bewegt, welches über eine Schubstange sowohl elektrisch als auch mechanisch mit dem Handgriff verbunden ist. In den besonders ergonomischen Handgriff aus hochwertigem PEEK-Kunststoff ist der Anschluss für standardisierte Bipolarkabel fest integriert. Dies erspart den Kauf teurer Spezialkabel und verhindert Verwechslungen. Wir liefern standardisierte Bipolarkabel für den Anschluss an praktisch alle gebräuchlichen HF-Generatoren. Die Bissinger POWERGRIP ist in drei Einzelteile zerlegbar. Das ermöglicht zum einen eine gründliche, zuverlässige Reinigung und erleichtert zum anderen die Reparatur oder den Ersatz defekter Teile. Darüber hinaus bietet die Bissinger POWERGRIP weitere wichtige Vorteile:

- Austauschbare Elektroden-Einsätze für verschiedene Einsatzbereiche
- Einfachstes Handling
- Gute Reinigungsmöglichkeit und Reparaturfreundlichkeit

Precise coagulation, more powerful grasping, better cutting and more exact work: the Bissinger POWERGRIP

The Bissinger POWERGRIP is an instrument used for grasping, cutting and bipolar coagulation in Minimally Invasive Surgery. It is characterized by a mechanism enabling well adjustable opening and closing of the jaws with very high pressure while grasping and cutting. This is accompanied by precise coagulation of the tissue. The jaws are moved by a double hinge which is connected electrically and mechanically to the handle by a slide rod. The connector for standardized bipolar cables is integrated in the particularly ergonomic handle made of high quality PEEK polymer. This saves the purchase of expensive special cables and prevents them from being connected incorrectly. We supply standardized bipolar cables for connection to practically all common high-frequency generators. The Bissinger POWERGRIP can be dismantled in three parts. This enables thorough and reliable cleaning and facilitates the execution of repair work or the replacement of defective parts. Beyond that, the Bissinger POWERGRIP offers a number of important further advantages:

- Exchangeable electrode inserts for different applications
- Easy handling
- Excellent cleaning and ease of repair



Powergrip Griff Powergrip handle	Powergrip Schaft Powergrip shaft	
Art. Nr. / Art. No.	Länge / length	Art. Nr. / Art. No.
82410001	34cm	82410034

Premium
Premium

Alle Premium-Elektroden sind mit dem neuen Doppelgelenkmechanismus und einer P-Coat Isolierung ausgestattet. Das neue Design ermöglicht nun ein Öffnen und Schließen der Maulteile ohne Austritt der Gelenkplättchen. Dadurch werden unkontrollierte Gewebekoagulationen verhindert.

All premium electrodes are equipped with the new double articulation mechanism and a P-Coat insulation. The new design permits opening and closing of the mouth parts without letting the joint platelets escape. This prevents uncontrolled tissue coagulations.

	Große Fasszange, gefenstert Large grasping forceps, fenestrated	82408010
	eCut, gebogen eCut, curved	82408039
Die Geometrie der neuen eCut Elektrode erlaubt es dem Anwender das Gewebe standardmäßig zu koagulieren und elektrisch zu schneiden. The geometry of the new eCut electrode permits the user to coagulate and electrically cut tissue by default.		

	Fasszange, gefenstert, gebogen Grasping forceps, fenestrated, curved	82408015
	Toucan Fasszange Toucan Grasping forceps	82408011
	Schere gebogen Scissors, curved	82408018
	Dissektor Maryland, gebogen Maryland dissector, curved	82408019

Standard
Standard

	Fasszange mit 2x3 Zähnen Grasping forceps with 2x3 teeth	82408053
	Große Fasszange Large grasping forceps	82400010
	Pinzette gebogen Forceps, curved	82400011
	Fasszange gebogen Grasping forceps, curved	82400015
	Delta Fasszange Delta Grasper	82400014

	Dissektor Maryland gebogen Maryland dissector, curved	82400019
	Schere gebogen Scissors, curved	82400018
	Hakenzange Claw forceps	82400012
	Duck Bill Fasszange Duck Bill Grasper	82400008



Bissinger – bessere Lösungen im Blick

Bipolare und monopolare Instrumente
Zubehör für die Elektrochirurgie
Chirurgische Instrumente
Entwicklung von Instrumenten
auf Kundenwunsch
Service und Reparaturen

Bissinger – Focus on better solutions

Bipolar and monopolar instruments
Accessories for electrosurgery
Surgical instruments
Design and development of instruments
to customer specifications
Service and repair

2-Bananenstecker*



3 m

Art. No. 80100010

5 m

Art. No. 80100013

U20



4 m

Art. No. 80100260

Erbe



3 m

Art. No. 80100017

5 m

Art. No. 80100018

Martin, Berchtold
Aesculap GK 55, GK 60



3 m

Art. No. 80100019

5 m

Art. No. 80100020

Valleylab, Lamidey, EMC



3 m

Art. No. 80100021

5 m

Art. No. 80100022

CE 0297

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*Entspricht nicht EU-Bestimmungen

*Non-compliant with EU standards

1/1 Container
1/1 Containers

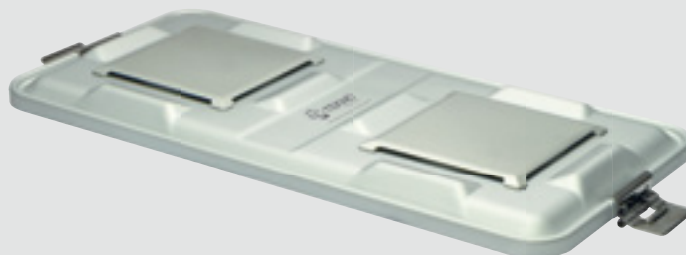
1/1 Contenaires
1/1 Contenedores
1/1 Container

TRISTAR **1/1**



No
FILTER

585 x 274 x 100 mm		tk 87170-B0F-SI
x 135 mm		tk 87180-B0F-SI
x 150 mm		tk 87190-B0F-SI
x 200 mm		tk 87200-B0F-SI
x 260 mm		tk 87210-B0F-SI



2 x
PTFE



2 x
BARRIER



2 x
VALVE

585 x 278 mm		tk 87420-L1F-SI	tk 87420-L1B-SI	tk 87420-L1V-SI
		tk 87420-L1F-YE	tk 87420-L1B-YE	tk 87420-L1V-YE
		tk 87420-L1F-GR	tk 87420-L1B-GR	tk 87420-L1V-GR
		tk 87420-L1F-BL	tk 87420-L1B-BL	tk 87420-L1V-BL
		tk 87420-L1F-RE	tk 87420-L1B-RE	tk 87420-L1V-RE
		tk 87420-L1F-BK	tk 87420-L1B-BK	tk 87420-L1V-BK

ACCESSORI BIPOLARI

Clamps per vessel sealing in chirurgia open

BIPOLAR ACCESSORIES

Bipolar clamps for vessel sealing in open surgery

CLAMPS PER COAGULAZIONE / VESSEL SEALING IN CHIRURGIA OPEN

Voltaggio nominale 650Vp /Sterilizzabili con autoclavi a vapore (100 volte a 121 °C/20min – 134 °C/10min)

Usabili con idonei generatori AF per coagulare/chiusure vasi con diametro fino a 8 mm

CLAMPS FOR COAGULATION / VESSEL SEALING IN OPEN SURGERY

Rated voltage 650Vp / Sterilizable by steam sterilizers (100 times at 121 °C/20min - 134 °C/10min)

Usable with suitable HF generators to coagulate/seal vessels with diameter up to 8 mm

BC-16



Cod.	L (cm)	Lunghezza punte/Length of tips	Larghezza punte / Width of tips	
			Base/ Base	Punta / End
BC-16	16	30 mm	4 mm	2 mm
BC-20	19	40 mm	5 mm	3,5 mm
BC-23	24	40 mm	5 mm	3,5 mm
BC-26	26	45 mm	6 mm	4 mm

BC-23



CAVI DI COLLEGAMENTO PER CLAMPS

Voltaggio nominale 650Vp /Sterilizzabili con autoclavi a vapore (100 volte a 121 °C/20min – 134 °C/10min)

CONNECTING CABLES FOR CLAMPS

Rated voltage 650Vp / Sterilizable by steam sterilizers (100 times at 121 °C/20min - 134 °C/10min)

CPB/EE	Cavo di collegamento (3 m) con connettore per l'apparecchio: 2 Spinotti Ø 6 mm <i>Connecting cable (3m) with connector to the unit: 2 Plugs Ø 6 mm</i>
CPB/EE5	Idem (5 m) <i>Ditto (5m)</i>

CONNETTORE APPARECCHIO

Distanza fra spinotti: da 14 a 38 mm

CONNECTOR TO THE HF UNIT

Distance between plugs: from 14 to 38 mm



alsa[®]
bologna

EXCELL NHP/T

ELECTROSURGICAL UNITS FOR
MONOPOLAR AND BIPOLAR USE
WITH 7.0" TOUCH-SCREEN



*A NEW STEP AHEAD
TO THE FUTURE*



The units EXCELL NHP/T series are provided with all the technical features, and the monopolar and bipolar currents needed to perform the most advanced electrosurgery

All models are provided with 10 currents for the monopolar cutting	
Pure Cut	Pure cut without coagulating effect. For open or laparoscopic surgery and for under liquid endoscopy (TURP, TURV).
Blend Cut 1	Cut blended with a medium coagulating effect. For open or laparoscopic surgery and for under liquid endoscopy (TURP, TURV).
Blend Cut 2	Cut blended with a very high coagulating effect. For open or laparoscopic surgery.
Pure Cut Pulsed	Pulsed pure cut without coagulating effect. For open or laparoscopic surgery.
Blend Cut Pulsed	Pulsed cut blended with a medium coagulating effect. For open or laparoscopic surgery.
Auto Pure Cut Micro	"Constant voltage" delicate pure cut without coagulating effect. For open or laparoscopic surgery and for under liquid endoscopy (TURP, TURV).
Auto Blend Cut Micro	"Constant voltage" delicate cut blended with a medium coagulating effect. For open or laparoscopic surgery and for under liquid endoscopy (TURP, TURV).
Auto Papillo Pure Cut	"Constant voltage" pure cut, without coagulating effect, for flexible endoscopy. With four modes of delivery: continuous and pulsed (slow, medium, fast).
Auto Polipo Blend Cut	"Constant voltage" cut, blended with a medium coagulating effect, for flexible endoscopy. With four modes of delivery: continuous and pulsed (slow, medium, fast).
Auto EndoCut	"Constant voltage" cut with alternating phases of cutting and blended cut, for flexible endoscopy. With four modes of delivery: 90% Coagulation and 10% Cut, 80% Coagulation and 20% Cut, 75% Coagulation and 25% Cut, 50% Coagulation and 50% Cut.
All models are provided with 5 currents for the monopolar coagulation	
Fulg Forced Coag	High voltage, contact free coagulation. For open or laparoscopic surgery, for under liquid endoscopy (TURP, TURV) and for flexible endoscopy.
Spray Coag	Very high voltage, contact free coagulation. For open or laparoscopic surgery, for under liquid endoscopy (TURP, TURV) and for flexible endoscopy.
Pulsed Spray Coag	Identical to the Spray coag current, but pulsed and more delicate.
Pin Point Contact Coag	Medium voltage, contact coagulation. For open or laparoscopic surgery, for under liquid endoscopy (TURP, TURV) and for flexible endoscopy.
Soft Micro Coag	Delicate, low voltage coagulation. For open or laparoscopic surgery.
The models NHP/TA-400 and NHP/TA-200 are provided with 2 currents for the Argon coagulation	
Standard	Very fast and efficacious coagulation (Spray Coag current enhanced by the Argon gas). For open or laparoscopic surgery and for flexible endoscopy.
Pulsed	Identical to the Standard current, but more delicate. (Pulsed Spray Coag current enhanced by the Argon gas).
All models are provided with 4 currents for the bipolar cutting	
Standard Bicut	Cut for open or laparoscopic surgery.
Blend Bicut	Cut blended with a very high coagulating effect (Coagulation = 95%) for open or laparoscopic surgery.
Saline Uro-Gyn Cut	Cut for endoscopy in saline (TURPis, TURVis) with two modes of delivery: continuous and pulsed. For urology and gynaecology. The continuous delivery is suitable to perform the vaporization.
Saline Arthro Cut	Cut for arthroscopy in saline with two modes of delivery: continuous and pulsed. For arthroscopy. The continuous delivery is suitable to perform the vaporization.
All models are provided with 3 currents for the bipolar coagulation and 2 currents for the bipolar vessel sealing	
Soft Micro Bicoag	Very precise and delicate coagulation. For open or laparoscopic surgery, for endoscopy in saline (TURPis, TURVis) and for flexible endoscopy.
Forced Macro Bicoag	Fast coagulation. For open or laparoscopic surgery.
Auto Soft Micro Bicoag	Identical to the Soft Micro Bicoag , but with Impedance sensing automatic activation/deactivation. It is not suitable for the endoscopy in saline. Activation with delay adjustable from 0 to 5 seconds and deactivation with bitonal, grave, acoustic signal.
Sealing	Current to coagulate/seal vessels up to 8 mm in open and laparoscopic surgery. Activation with pedal and automatic Impedance sensing deactivation with bitonal, acute, acoustic signal.
Auto Sealing	Identical to the Sealing , but with Impedance sensing automatic activation/deactivation. It is not suitable for the endoscopy in saline. Activation with delay adjustable from 0 to 5 seconds and deactivation with bitonal, grave, acoustic signal.

Technical features of all models

HF generator	Meets IEC 60601-1 and IEC 60601-2-2 (Latest editions). Supply section “switching” type.
EMC compatibility	Meets IEC 60601-1-2 (Latest edition).
EC Classification and approval	Class IIB according to 93/42/CEE (and its revised version) – Certificate nr. 187/MDD (IMQ 0051).
ALSA quality system	Meets ISO 9001 and ISO 13485 (Latest editions). Certificates 9120.ALSA and 9124.ALS2 (IMQ 0051).
Classification according to IEC 60601-1	Class I, CF type with the following typical low frequency leakage currents (all cables tied together): On the patient: 4µA = 0,004mA / Into the enclosure: 1µA = 0,001mA / To earth: 30µA = 0,03mA.
Output circuit according to IEC 60601-2-2	FLOATING (Isolated at high and low frequencies) and protected against the use of the defibrillator. Typical HF leakage currents measured at the unit: Monopolar currents = 90mA, Bipolar currents = 60mA.
Working frequency	Monopolar and bipolar currents: 440kHz ± 5%.
Functioning control	Computerized MASTER/SLAVE SYSTEM - It performs a Main Auto-check at the switching ON (repeated every 30 minutes of operation) and the continuous Standard Auto-check during use. - It stops the power activation in case of hardware/software failures, mistakes of use, an anomalous power delivery, and it signals them by acoustic and visual Error Codes. - It memorizes all Error Codes to help the check and the technical assistance.
Self-adjusting of output powers	Computerized self-adjustment with PER (Power Efficiency Rating > 98%) according to the impedances of tissues (Feed-back in real time - 7000 times/sec) by two different systems: ADC System – Dynamic self-adjustment with constant power The powers have a progressive setting (Micro and Macro setting with steps from 0,1 to 10W). Monopolar currents (from 1 to 10W), Bipolar currents (from 0,1W to 5W). APC System - Fully automatic control The powers have a setting with 10 effects (the unit shows, for each effect, the maximum delivered power).
Control of the HF leakage currents	By a specific computerized circuit with alarms.
Memorization of programs	100 programs identifiable by number and text (Surgical use or Name of the surgeon).
Usable pencils or instruments	All models allow the following use of the monopolar and bipolar accessories: - One/two either hand-switched or foot-switched monopolar pencils or instruments. Two monopolar pencils can be used simultaneously according to IEC 60601-2-2. - One/two bipolar instruments by foot-switch activation (When selecting the Auto Soft Micro Bicoag or the Auto Sealing currents, an instrument is usable by the Impedance sensing automatic activation/deactivation). The models TA-400 and TA-200 allow, when the Argon section is ON, the use also of the following: - One hand-switched or foot-switched pencil/instrument for the Argon enhanced electro-surgery.
Twin foot-switches	The unit can be used by either one or two waterproof (IPN8) twin foot-switches. - Only with one twin foot-switch (DS/Esw or DS/Eswl, large model for the use in endoscopy) with a Foot-selector to activate either the monopolar or the bipolar currents. - Only with one twin foot-switch (DS/B) to activate the bipolar currents only. - With both twin foot-switches, one to activate the monopolar currents and one to activate the bipolar ones.
Control circuit of the neutral electrode	NPCC System with double circuit: Contact quality monitor and Continuity monitor with four progressive alarm lights and stop of the power delivery. The circuit operates as follows: - It checks all kinds of neutral electrode, both “split” double area and “non split” single area. - It has two modes of use: Large electrodes for adults and Small electrodes for paediatrics and new-born. - It allows the use of cables with both European “Ø 6,35mm” and USA “2 pins” connectors.
Luminous and acoustic signals of activation and alarm	They meet IEC 60601-2-2 (Latest edition). Lights: Cutting = yellow, Coagulation = blue, Alarms and Error codes = red Activation sounds: Continuous (acute for the cut and grave for the coagulation, with level adjustable from 45 to 65dB), including a bitonal sound to indicate the power deactivation when using the currents: Auto Soft Micro Bicoag, Sealing and Auto Sealing. Alarm sound: Intermittent (High >65dB and not adjustable).
Mains supply and consumption, Mains switch, Fuses and Standby	100 / 230V ± 10% ~ 50/60Hz (Consumption: Max. 3,6A = 828VA, Standby 0,4A = 92VA). Bipolar switch (green), Two fuses 8A, Standby mode selectable on the touch-screen.
Equipotential connection	Standard DIN 42801 plug.
Enclosure, Cooling	Metal painted case, protected against the spilling of liquids according to IEC 60601-2-2. Cooling by convection (No fan).
Software updating and calibration	Updating by a serial port connected to a PC, calibration on-site.
Dimensions and weight (LxWxH)	NHP/T-400 and T-200: 38x35x19cm - 10Kg – NHP/TA-400 and TA-200: 38x38x19cm - 10,5Kg.
Technical features of the Argon gas section (Models TA-400 and TA-200 only)	
Gas (Supply)	By 1 or 2 cylinders (5lt) or by centralized supply with max pressure of 4,5 atm.
Gas (Antibacterial protection)	Antibacterial filter on the gas output.
Gas (Working pressure and Flow)	Pressure: 2 atm. Flow: Max 15lt/min, adjustable from 1 to 15 lt/min and self-adjusted.
Gas (Pressure, Consumption)	By the main Auto-check system of the unit and Pressure Safety System. It blocks the usability of the Argon section either if the gas is absent/not sufficient or its pressure is too high, by informing the users through alarms and Error Codes. The system includes a pressure reducer and a safety valve.

EXCELL NHP/T-400 and EXCELL NHP/TA-400 – THE CURRENTS

MONOPOLAR CUTTING

	Pure Cut	Blend Cut 1	Blend Cut 2	Pure Cut Pulsed	Blend Cut Pulsed	Auto Pure Cut Micro	Auto Blend Cut Micro	Auto Papillo Pure Cut	Auto Polipo Blend Cut	Auto Endocut
Max Output Power	400 W	300 W	250 W	400 W	250 W	300 W	300 W	300 W	300 W	300 W
Rated load	400 Ω	400 Ω	400 Ω	400 Ω	400 Ω	300 Ω	300 Ω	300 Ω	300 Ω	300 Ω
Vpp	2550	3390	3330	2640	3330	1137	1500	1140	1490	1670
Crest factor	1,46	1,94	2,29	2	3,2	1,5	1,98	1,5	1,98	
Modulation	0	17 kHz	17 kHz	3 Hz	50 Hz	0	17 kHz	0	17 kHz	-
Duty Cycle	100%	95%	65%	50%	50%	100%	90%	100%	95%	
Power setting	Progressive with steps from 1 to 10 W						10 Effects			
Power control	ADC System - Dynamic self-adjusting with constant power						APC System - Totally self-adjusting with constant voltage			

MONOPOLAR COAGULATION

	Fulg Forced Coag	Spray Coag	Pin Point Contact Coag	Pulsed Spray Coag	Soft Micro Coag
Max Output Power	150 W	200 W	300 W	200 W	280 W
Rated load	300 Ω	700 Ω	400 Ω	700 Ω	300 Ω
Vpp	4500	7750	3700	7850	3300
Crest factor	6,45	7,75	2,2	11,54	2,16
Modulation	60 kHz	30 kHz	17 kHz	3 Hz	17 kHz
Duty Cycle	18%	7%	85%	50%	75%
Power setting	Progressive with steps from 1 to 10 W				10 Effects
Power control	ADC System - Dynamic self-adjusting with constant power				APC System - Totally self-adjusting with constant voltage

ARGON PLASMA COAGULATION (Model NHP/TA-400 only)

	Spray Coag + Gas Argon	Pulsed Spray Coag + Gas Argon
Max Output Power	200 W	200 W
Rated load	700 Ω	700 Ω
Vpp	7750	7850
Crest factor	7,75	11,54
Modulation	30 kHz	3 Hz
Duty Cycle	7%	50%
Power setting	Progressive with steps from 1 to 10 W	
Gas setting	From 1 to 15 Lt/min	
Power control	ADC System – Dynamic self-adjusting with constant power	

BIPOLAR CUTTING

	Saline Uro-Gyn Cut	Saline Arthro Cut	Standard Bicut	Blend Bicut
Max Output Power	350 W	230 W	200 W	160 W
Rated load	350 Ω	350 Ω	300 Ω	200 Ω
Vpp	1070	1070	1070	740
Crest factor	1,5	1,5	1,5	1,57
Modulation	0	0	0	17 kHz
Duty Cycle	100%	100%	100%	95%
Power setting	10 Effects		Progressive with steps from 0,1 to 5 W	
Power control	ADC System - Dynamic self-adjusting with constant power			

BIPOLAR COAGULATION AND VESSEL SEALING

	Soft Micro Bicoag	Auto Soft Micro Bicoag	Sealing	Auto Sealing	Forced Macro Bicoag
Max Output Power	140 W	140 W	320 W	320 W	200 W
Rated load	100 Ω	100 Ω	50 Ω	50 Ω	100 Ω
Vpp	460	460	780	780	550
Crest factor	1,56	1,56	2,47	2,47	1,6
Modulation	0	0	0	0	0
Duty Cycle	100%	100%	100%	100%	100%
Power setting	Progressive with steps from 0,1 to 5 W		10 Effects		Progressive with steps from 0,1 to 5 W
Power control	APC System - Totally self-adjusting with constant voltage			ADC System - Dynamic self-adjusting with constant power	

EXCELL NHP/T-200 and EXCELL NHP/TA-200 – THE CURRENTS

MONOPOLAR CUTTING

	Pure Cut	Blend Cut 1	Blend Cut 2	Pure Cut Pulsed	Blend Cut Pulsed	Auto Pure Cut Micro	Auto Blend Cut Micro	Auto Papillo Pure Cut	Auto Polipo Blend Cut	Auto Endocut
Max Output Power	200 W	200 W	200 W	200 W	200 W	200 W	200 W	200 W	200 W	200 W
Rated load	400 Ω	400 Ω	400 Ω	400 Ω	400 Ω	300 Ω	300 Ω	300 Ω	300 Ω	300 Ω
Vpp	2550	3390	3330	2640	3330	1137	1500	1140	1490	1670
Crest factor	1,46	1,94	2,29	2	3,2	1,5	1,98	1,5	1,98	
Modulation	0	17 kHz	17 kHz	3 Hz	50 Hz	0	17 kHz	0	17 kHz	-
Duty Cycle	100%	95%	65%	50%	50%	100%	90%	100%	95%	
Power setting	Progressive with steps from 1 to 10 W						10 Effects			
Power control	ADC System – Dynamic self-adjusting with constant power						APC System - Totally self-adjusting with constant voltage			

MONOPOLAR COAGULATION

	Fulg Forced Coag	Spray Coag	Pin Point Contact Coag	Pulsed Spray Coag	Soft Micro Coag
Max Output Power	150 W	200 W	200 W	200 W	200 W
Rated load	300 Ω	700 Ω	400 Ω	700 Ω	300 Ω
Vpp	4500	7750	3700	7850	2875
Crest factor	6,4	7,75	2,2	11,54	2,1
Modulation	60 kHz	30 kHz	17 kHz	3 Hz	17 kHz
Duty Cycle	18%	7%	85%	50%	75%
Power setting	Progressive with steps from 1 to 10 W				10 Effects
Power control	ADC System - Dynamic self-adjusting with constant power				APC System - Totally self-adjusting with constant voltage

ARGON PLASMA COAGULATION (Model NHP/TA-200 only)

	Spray Coag + Gas Argon	Pulsed Spray Coag + Gas Argon
Max Output Power	200 W	200 W
Rated load	700 Ω	700 Ω
Vpp	7750	7850
Crest factor	7,75	11,54
Modulation	30 kHz	3 Hz
Duty Cycle	7%	50%
Power setting	Progressive with steps from 1 to 10 W	
Gas setting	From 1 to 15 Lt/min	
Power control	ADC System - Dynamic self-adjusting with constant power	

BIPOLAR CUTTING

	Saline Uro-Gyn Cut	Saline Arthro Cut	Standard Bicut	Blend Bicut
Max Output Power	350 W	230 W	200 W	160 W
Rated load	350 Ω	350 Ω	300 Ω	200 Ω
Vpp	1070	1070	1070	740
Crest factor	1,5	1,5	1,5	1,57
Modulation	0	0	0	17 kHz
Duty Cycle	100%	100%	100%	95%
Power setting	10 Effects		Progressive with steps from 0,1 to 5 W	
Power control	ADC System – Dynamic self-adjusting with constant power			

BIPOLAR COAGULATION AND VESSEL SEALING

	Soft Micro Bicoag	Auto Soft Micro Bicoag	Sealing	Auto Sealing	Forced Macro Bicoag
Max Output Power	140 W	140 W	320 W	320 W	200 W
Rated load	100 Ω	100 Ω	50 Ω	50 Ω	100 Ω
Vpp	460	460	780	780	550
Crest factor	1,56	1,56	2,47	2,47	1,6
Modulation	0	0	0	0	0
Duty Cycle	100%	100%	100%	100%	100%
Power setting	Progressive with steps from 0,1 to 5 W		10 Effects		Progressive with steps from 0,1 to 5 W
Power control	APC System - Totally self-adjusting with constant voltage		ADC System - Dynamic self-adjusting with constant power		



*EXCELL NHP/T-400
with footswitch DS/Esw*



*EXCELL NHP/T-400
with footswitch DS/Eswl*

alsa apparecchi medicali s.r.l.

Via C. Bonazzi, 16
40013 CASTEL MAGGIORE (BO) - ITALY
Tel. +39 051 70 01 01 (r.a.) Fax +39 051 70 21 82
www.alsamed.com
alsa@alsamed.com



Power grip-LGF Cod. 801504



CERTIFICATO CE

Certificato n. 187/MDD

Dichiarazione di approvazione del sistema qualità

(Sistema completo di garanzia qualità)

Visto l'esito delle verifiche condotte in conformità all'Allegato II, con l'esclusione del punto 4, della direttiva 93/42/CEE e s.m.i., si dichiara che la ditta:

ALSA APPARECCHI MEDICALI SRL

40013 CASTEL MAGGIORE (BO) - VIA C. BONAZZI 16 (ITA) - Italy

mantiene nello stabilimento di:

40013 CASTEL MAGGIORE (BO) - VIA C. BONAZZI 16 (ITA) - Italy

un sistema qualità che assicura la conformità dei seguenti prodotti:

Aspiratori chirurgici

Accessori per aspiratori medicali e vacuum-extractors

Accessori per elettrobisturi

Aspiratori di fumi elettrochirurgici

Elettrobisturi

Carrelli non elettrificati per apparecchi per elettrochirurgia, aspiratori di fumi elettrochirurgici e aspiratori medicali

serie e modelli indicati in Allegato

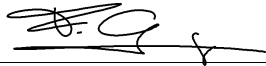
ai requisiti essenziali della direttiva suddetta ad essi applicabili (in tutte le fasi dalla progettazione al controllo finale) ed è sottoposta alla sorveglianza prevista dal punto 5 dell'Allegato II. Per i dispositivi in classe III questo certificato è valido solamente con il relativo certificato di esame CE della progettazione di Allegato II.4.

Riferimento pratiche IMQ:

10A9800405; 10A9900240; 10AA00040; 10AA00016; 10AA00060; 10AA00156; 10AA00262; 10AB00169; 10AB000170; 10AC00210; 10AE00050; 10AF00011; 10AF00032; 10AF00192; 10AG00183; 10AH00132; 10AH00244; 10AI00034; 10AI00127; 10AI00122; 10AJ00093; 10EL00005; COMEDCONMHDM110021912-01; 10SN00082; DM16-0007485-01; 10AN00148; 10EO00012; DM16-0007485-01; DM17-0017739-01; DM18-0029069-01; DM18-0029585-01; DM18-0031303; DM19-0046045-01.

Questa Dichiarazione di approvazione è rilasciata dall'IMQ S.p.A. quale organismo notificato per la direttiva 93/42/CEE e s.m.i. Il numero identificativo dell'IMQ S.p.A. quale organismo notificato è: 0051.

Emesso il: 1999-05-10
Data aggiornamento: 2019-11-25
Sostituisce: 2018-11-07
Data scadenza: 2022-03-13


IMQ DocuSign



CERTIFICATO CE

Certificato n. 187/MDD

Allegato

Aspiratori chirurgici

Serie: VACUMSOL Modd. VACUMSOL AS-60; VACUMSOL AS-65; VACUMSOL AS-65/H.

Serie: VORTEX-S Modd. VORTEX-S AS-200/30LT; VORTEX-S AS-200/20LT VE; VORTEX-S AS-200/30LT VE;
VORTEX-S AS-200/20LT.

Serie: VORTECO Modd. VORTECO AS-100/15LT; VORTECO AS-100/20LT; VORTECO AS-100/30LT;
VORTECO AS-100/30LT VE.

Serie: POLIVAC Modd. POLIVAC B4/SLT 30 1; POLIVAC B4/SLT 30 2; POLIVAC B4/SLT 30 1-EXP; POLIVAC
B4/SLT 30 2-EXP; POLIVAC B4/SLT 30 P-EXP; POLIVAC B4/SLT 50 E; POLIVAC B4/SLT 30 1VE-EXP; POLIVAC
B4/SLT 30 PVE-EXP.

Accessori per aspiratori medicali e vacuum-extractors

Modd. come da documento allegato "Elenco-AccAspir#A" del 29.03.2005; valido solo se provvisto del
timbro IMQ.

Accessori per elettrobisturi

Modd. come da documento allegato "AccElett-Elenco#D" del 30.03.2008; valido solo se provvisto del
timbro IMQ.

Aspiratori di fumi elettrochirurgici

Serie: CS Modd. CS200; CS200LC; CS900LC

Elettrobisturi

Serie: ALSATOM Modd. ALSATOM SU 50-MPC; ALSATOM SU 100-MPC; ALSATOM SU 140-MPC; ALSATOM
SU 140/D-MPC; ALSATOM SU 140/BD-MPC; ALSATOM SU 140/D-MPC (100V-60Hz).

Serie: MCDSe Modd. EXCELL 200 MCDSe; EXCELL 250 MCDSe; EXCELL 350 MCDSe; EXCELL 400 MCDSe;
EXCELL 250/A MCDSe; EXCELL 400/A MCDSe.

Serie: NHP Modd. EXCELL NHP 250/D; EXCELL NHP 350/D; EXCELL NHP 400/D; EXCELL NHP 250/DA;
EXCELL NHP 400/DA; EXCELL NHP ENDOMED.

Mod. MB 140-PRO

Marca ALCYON

Modd. BIPOLAR HF 100; BIPOLAR HF 140.

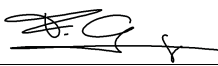
Marca BUTTERFLY ITALIA

Serie: NHP/T Modd. EXCELL NHP/T-400; EXCELL NHP/T-200; EXCELL NHP/TA-400; EXCELL NHP/TA-200.

Mod. PWT-400

Marca TONTARRA

Emesso il: 1999-05-10
Data aggiornamento: 2019-11-25
Sostituisce: 2018-11-07
Data scadenza: 2022-03-13


IMQ

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CERTIFICATO CE

Certificato n. 187/MDD

Allegato

Elettrobisturi

Serie: TopTom Modd. TopTom SU 50; TopTom SU 100; TopTom SU 140; TopTom SU 140/D.

Serie: AMNOTOM Modd. AMNOTOM 160 BASE; AMNOTOM 400 COMPACT; AMNOTOM 400 PREMIUM;
AMNOTOM 400 PREMIUM A.
Marca AMNOTEC

Carrelli non elettrificati per apparecchi per elettrochirurgia, aspiratori di fumi elettrochirurgici e aspiratori medicali

Modd. H10; H10/AB; H23/SE; H25; H26

Emesso il: 1999-05-10
Data aggiornamento: 2019-11-25
Sostituisce: 2018-11-07
Data scadenza: 2022-03-13

A handwritten signature in black ink, appearing to be 'F. G.', is written over a horizontal line.

DocuSign

IMQ



www.imq.it

CERTIFICATO N.
CERTIFICATE N. **9120.ALSA**

SI CERTIFICA CHE IL SISTEMA DI GESTIONE PER LA QUALITA' DI
WE HEREBY CERTIFY THAT THE QUALITY MANAGEMENT SYSTEM OPERATED BY

ALSA APPARECCHI MEDICALI SRL

VIA C. BONAZZI 16 - 40013 CASTEL MAGGIORE (BO)

UNITA' OPERATIVE / OPERATIVE UNITS

VIA C. BONAZZI 16 - 40013 CASTEL MAGGIORE (BO)

E' CONFORME ALLA NORMA / IS IN COMPLIANCE WITH THE STANDARD

ISO 9001:2015

PER LE SEGUENTI ATTIVITA' / FOR THE FOLLOWING ACTIVITIES

Progettazione, produzione, immissione in commercio, assistenza tecnica e produzione conto terzi di elettrobisturi
con o senza gas ARGON e relativi accessori, aspiratori chirurgici e relativi accessori, aspiratori di fumi
elettrochirurgici e relativi accessori

*Design, manufacture, placing on the market, technical service and contract manufacturing of electrosurgical units
with or without ARGON gas and related accessories, electrosurgical aspirators and related accessories,
electrosurgical smoke evacuators and related accessories*

Ulteriori informazioni riguardanti l'applicabilità dei requisiti ISO 9001:2015 possono essere ottenute consultando l'organizzazione
Further clarifications regarding the applicability of ISO 9001:2015 requirements may be obtained by consulting the organization

IL PRESENTE CERTIFICATO E' SOGGETTO AL RISPETTO DEL
REGOLAMENTO PER LA CERTIFICAZIONE DEI SISTEMI DI GESTIONE

THE USE AND THE VALIDITY OF THE CERTIFICATE SHALL SATISFY THE
REQUIREMENTS OF THE RULES FOR CERTIFICATION OF MANAGEMENT SYSTEMS

DATE:	PRIMA CERTIFICAZIONE	EMISSIONE CORRENTE	SCADENZA
	<i>FIRST CERTIFICATION</i>	<i>CURRENT ISSUE</i>	<i>EXPIRY</i>
	1998-05-05	2019-10-31	2022-12-19

IMQ S.p.A. - VIA QUINTILIANO, 43 - 20138 MILANO ITALY
Management Systems Division - Flavio Ornago



*IQNet, the association of the world's first class
certification bodies, is the largest provider of management
System Certification in the world.
IQNet is composed of more than 30 bodies and counts
over 150 subsidiaries all over the globe.*



SGQ N° 005 A

Membro degli Accordi di Mutuo
Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC
Mutual Recognition Agreements

IAF: 19

La validità del certificato è subordinata a sorveglianza annuale e riesame completo
del Sistema di Gestione con periodicità triennale
The validity of the certificate is submitted to annual audit and a reassessment
of the entire Management System within three years



Organismo di Certificazione Federato CISQ
www.imq.it



www.cisq.com

CISQ è la Federazione Italiana di Organismi di
Certificazione dei sistemi di gestione aziendale.
CISQ is the Italian Federation of management
system Certification Bodies.



THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

CISQ/IMQ has issued an IQNet recognized certificate that the organization:

ALSA APPARECCHI MEDICALI SRL

VIA C. BONAZZI 16 - 40013 CASTEL MAGGIORE (BO)

has implemented and maintains a

Quality Management System

for the following scope:

Design, manufacture, placing on the market, technical service and contract manufacturing of electrosurgical units with or without ARGON gas and related accessories, electrosurgical aspirators and related accessories, electrosurgical smoke evacuators and related accessories

Further clarifications regarding the applicability of ISO 9001:2015 requirements may be obtained by consulting the organization

which fulfills the requirements of the following standard:

ISO 9001:2015

Issued on: 2019 - 10 - 31

Expires on: 2022 - 12 - 19

This attestation is directly linked to the IQNet Partner's original certificate and shall not be used as a stand-alone document

Registration Number: IT - 1231



Alex Stoichitoiu
President of IQNET



Ing. Claudio Provetti
President of CISQ

IQNet Partners*:

AENOR Spain AFNOR Certification France APCER Portugal CCC Cyprus CISQ Italy
CQC China CQM China CQS Czech Republic Cro Cert Croatia DQS Holding GmbH Germany FCAV Brazil
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NYCE-SIGE México PCBC Poland Quality Austria Austria RR Russia SII Israel SIQ Slovenia
SIRIM QAS International Malaysia SQS Switzerland SRAC Romania TEST St Petersburg Russia TSE Turkey YUQS Serbia
IQNet is represented in the USA by: AFNOR Certification, CISQ, DQS Holding GmbH and NSAI Inc.



www.imq.it

CERTIFICATO N.
CERTIFICATE N. **9124.ALS2**

SI CERTIFICA CHE IL SISTEMA DI GESTIONE PER LA QUALITA' DI
WE HEREBY CERTIFY THAT THE QUALITY MANAGEMENT SYSTEM OPERATED BY

ALSA APPARECCHI MEDICALI SRL

VIA C. BONAZZI 16 - 40013 CASTEL MAGGIORE (BO)

UNITA' OPERATIVE / OPERATIVE UNITS

VIA C. BONAZZI 16 - 40013 CASTEL MAGGIORE (BO)

E' CONFORME ALLA NORMA / IS IN COMPLIANCE WITH THE STANDARD

ISO 13485:2016

PER LE SEGUENTI ATTIVITA' / FOR THE FOLLOWING ACTIVITIES

Progettazione, produzione, immissione in commercio, assistenza tecnica e produzione conto terzi di elettrobisturi
con o senza gas ARGON e relativi accessori, aspiratori chirurgici e relativi accessori, aspiratori di fumi
elettrochirurgici e relativi accessori

*Design, manufacture, placing on the market, technical service and contract manufacturing of electrosurgical units
with or without ARGON gas and related accessories, electrosurgical aspirators and related accessories,
electrosurgical smoke evacuators and related accessories*

Ulteriori informazioni riguardanti l'applicabilità dei requisiti ISO 13485:2016 possono essere ottenute consultando l'organizzazione
Further clarifications regarding the applicability of ISO 13485:2016 requirements may be obtained by consulting the organization

IL PRESENTE CERTIFICATO E' SOGGETTO AL RISPETTO DEL
REGOLAMENTO PER LA CERTIFICAZIONE DEI SISTEMI DI GESTIONE

*THE USE AND THE VALIDITY OF THE CERTIFICATE SHALL SATISFY THE
REQUIREMENTS OF THE RULES FOR CERTIFICATION OF MANAGEMENT SYSTEMS*

DATE:	PRIMA CERTIFICAZIONE	EMISSIONE CORRENTE	SCADENZA
	<i>FIRST CERTIFICATION</i>	<i>CURRENT ISSUE</i>	<i>EXPIRY</i>
	1998-11-30	2019-10-31	2022-12-19

IMQ S.p.A. - VIA QUINTILIANO, 43 - 20138 MILANO ITALY
Management Systems Division - Flavio Ornago

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IQNet is composed of more than 30 bodies and counts
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SGQ N° 005 A

Membro degli Accordi di Mutuo
Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC
Mutual Recognition Agreements

La validità del certificato è subordinata a sorveglianza annuale e riesame completo
del Sistema di Gestione con periodicità triennale
The validity of the certificate is submitted to annual audit and a reassessment
of the entire Management System within three years



Organismo di Certificazione Federato CISQ
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www.cisq.com

CISQ è la Federazione Italiana di Organismi di
Certificazione dei sistemi di gestione aziendale.
CISQ is the Italian Federation of management
system Certification Bodies.



THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

CISQ/IMQ has issued an IQNet recognized certificate that the organization:

ALSA APPARECCHI MEDICALI SRL

VIA C. BONAZZI 16 - 40013 CASTEL MAGGIORE (BO)

has implemented and maintains a

Quality Management System

for the following scope:

Design, manufacture, placing on the market, technical service and contract manufacturing of electrosurgical units with or without ARGON gas and related accessories, electrosurgical aspirators and related accessories, electrosurgical smoke evacuators and related accessories

Further clarifications regarding the applicability of ISO 13485:2016 requirements may be obtained by consulting the organization

which fulfills the requirements of the following standard:

ISO 13485:2016

Issued on: 2019 - 10 - 31

Expires on: 2022 - 12 - 19

This attestation is directly linked to the IQNet Partner's original certificate and shall not be used as a stand-alone document

Registration Number: IT - 126301



Alex Stoichitoiu
President of IQNET



Ing. Claudio Provetti
President of CISQ

IQNet Partners*:

AENOR Spain AFNOR Certification France APCER Portugal CCC Cyprus CISQ Italy
CQC China CQM China CQS Czech Republic Cro Cert Croatia DQS Holding GmbH Germany FCAV Brazil
FONDONORMA Venezuela ICONTEC Colombia Inspecta Sertifiointi Oy Finland INTECO Costa Rica
IRAM Argentina JQA Japan KFQ Korea MIRTEC Greece MSZT Hungary Nemko AS Norway NSAI Ireland
NYCE-SIGE México PCBC Poland Quality Austria Austria RR Russia SII Israel SIQ Slovenia
SIRIM QAS International Malaysia SQS Switzerland SRAC Romania TEST St Petersburg Russia TSE Turkey YUQS Serbia
IQNet is represented in the USA by: AFNOR Certification, CISQ, DQS Holding GmbH and NSAI Inc.

EC Certificate

mdc medical device certification GmbH

Notified Body 0483
herewith certifies that

Tekno-Medical Optik-Chirurgie GmbH
Sattlerstraße 11
78532 Tuttlingen
Germany

for the scope

**instruments for high frequency surgery,
endoscopic instruments and devices with accessories,
suction- and irrigation units, battery operated units
(see attachment)**

has introduced and applies a

Quality System

for the design, manufacture and final inspection.

The mdc audit has proven that this quality system
meets all requirements according to

**Annex II – excluding Section 4
of the Council Directive 93/42/EEC**

of 14 June 1993 concerning medical devices.

The surveillance will be held as specified in Annex II, Section 5.

Valid from	2018-11-19
Valid until	2023-07-04
Registration no.	D1043500076
Report no.	P18-00452-133952
Stuttgart	2018-11-19



Head of Certification Body



Attachment of the certificate

No. D1043500076

Date 2018-11-19

Page 1 of 1

Product category	Product	Class	Product code
Battery operated units	Drill, battery operated and accessories Saw, battery operated and accessories	Ila	16-868
Instruments for high frequency surgery	Electrosurgical units with accessories	Ilb	11-490
	HF-handles	Ilb	11-499
	Bipolar coagulation forceps, bipolar coagulation grippers Bipolar and monopolar forceps	Ilb	11-502
	Monopolar and bipolar electrodes Coagulation electrodes, coagulation grippers, scissors	Ilb	16-206
	Electrodes, electrosurgical, sterile and non sterile Bipolar coagulation forceps EVO II Bipolar clamps and scissors-clamps Monopolar laparoscopic electrodes	Ilb	16-860
Endoscopic instruments and devices with accessories	Morcellator handpiece complete	Ila	11-333
	Morcellator	Ila	11-333
	Arthroscopic shaver systems with accessories	Ila	17-918
	Laparoscopic instruments for electrosurgery	Ilb	11-502
	Resectoscopes monopolar and bipolar	Ilb	13-335
	Insufflators, laparoscopy with accessories	Ilb	16-849
Suction- and irrigation units	Suction- /irrigation unit MULTI PUMP and accessories Pump for arthroscopy ART PUMP II and accessories Pump for arthroscopy ART PUMP II D and accessories Pump for hysteroscopy HYS PUMP II and accessories Pump for urology URO PUMP II and accessories	Ila	17-424



Head of Certification Body



EC Certificate

mdc medical device certification GmbH

Notified Body 0483
herewith certifies that

Tekno-Medical Optik-Chirurgie GmbH

**Sattlerstraße 11
78532 Tuttlingen
Germany**

for the scope

**sterile scalpel knives UMDNS 12-252;
shaver blades, UMDNS 17-117;
saw blades for orthopedics, UMDNS 13-447**

has introduced and applies a

Quality System

for the manufacture of the products concerned and carries out a
final inspection as specified in Annex V, Section 3.

The mdc audit has proven that this quality system
meets all requirements according to

Annex V – Section 3 of the Council Directive 93/42/EEC

of 14 June 1993 concerning medical devices.

The surveillance will be held as specified in Annex V, Section 4.

Valid from	2018-07-05
Valid until	2023-07-04
Registration no.	D1043500072
Report no.	P18-00452-117481
Stuttgart	2018-06-27



Head of Certification Body



EC Certificate

mdc medical device certification GmbH

Notified Body 0483
herewith grants

Tekno-Medical Optik-Chirurgie GmbH
Sattlerstraße 11
78532 Tuttlingen
Germany

for the scope

aneurysm clip
(sterile and non-sterile, temporary and permanent,
made of titanium and steel),
UMDNS 10-905

the

EC Design Examination Certificate

The examination of the design of the product by mdc has proven
that the design meets the requirements according to

Annex II – Section 4 **of the Council Directive 93/42/EEC**

of 14 June 1993 concerning medical devices.

This certificate is only valid in connection with a valid
mdc certificate according to Annex II – excluding section 4 for the
above mentioned products.

Valid from	2018-11-22
Valid until	2023-11-22
Registration no.	D1043500074
Report no.	P18-00455-117538
Stuttgart	2018-11-22



Head of Certification Body



EC Certificate

mdc medical device certification GmbH

Notified Body 0483
herewith certifies that

Tekno-Medical Optik-Chirurgie GmbH
Sattlerstraße 11
78532 Tuttlingen
Germany

for the scope

**instruments for high frequency surgery,
endoscopic instruments and devices with accessories,
suction- and irrigation units, battery operated units
(see attachment)**

has introduced and applies a

Quality System

for the design, manufacture and final inspection.

The mdc audit has proven that this quality system
meets all requirements according to

**Annex II – excluding Section 4
of the Council Directive 93/42/EEC**

of 14 June 1993 concerning medical devices.

The surveillance will be held as specified in Annex II, Section 5.

Valid from	2021-05-20
Valid until	2023-07-04
Registration no.	D1043500083
Report no.	P21-00826-205644
Stuttgart	2021-05-20



Head of Certification Body



Attachment of the certificate

No. D1043500083

Date 2021-05-20

Page 1 of 1

Product category	Product	Class	Product code
Instruments for high frequency surgery	Electrosurgical units with accessories	IIb	11-490
	HF-handles	IIb	11-499
	Bipolar coagulation forceps Bipolar forceps	IIb	11-502
	Monopolar and bipolar electrodes Coagulation electrodes, coagulation grippers, scissors	IIb	16-206
	Electrodes, electrosurgical, sterile and non sterile Bipolar coagulation forceps EVO II Bipolar clamps and scissors-clamps Monopolar laparoscopic electrodes	IIb	16-860
	Pistol handle, with HF	IIa	15-206
Endoscopic instruments and devices with accessories	Pistol handle, without HF	IIa	15-206
	Laparoscopic instruments for electrosurgery	IIb	11-502
	Resectoscopes monopolar and bipolar	IIb	13-335
	Insufflators, laparoscopy with accessories	IIb	16-849
Suction- and irrigation units	Arthroscopic shaver systems with accessories	IIa	17-918
	Suction- /irrigation unit MULTI PUMP and accessories	IIa	17-424
	Pump for arthroscopy ART PUMP II and accessories		
	Pump for arthroscopy ART PUMP II D and accessories		
	Pump for hysteroscopy HYS PUMP II and accessories		
	Pump for urology URO PUMP II and accessories		
Battery operated units	Drill, battery operated and accessories	IIa	16-868
	Saw, battery operated and accessories		



Head of Certification Body



Certificate

mdc medical device certification GmbH
certifies that

Tekno-Medical Optik-Chirurgie GmbH
Sattlerstraße 11
78532 Tuttlingen
Germany

for the scope

**development, manufacturing and distribution of
surgical instruments and accessories, endoscopic instruments and
devices with accessories, dental instruments, instruments and implants for osteosynthesis,
OR-lamps, OR-tables and accessories and repair service for rigid endoscopes**

has introduced and applies a

Quality Management System

The mdc audit has proven that this quality management system
meets all requirements of the following standard

EN ISO 13485

Medical devices – Quality management systems –
Requirements for regulatory purposes

EN ISO 13485:2016 + AC:2016 - ISO 13485:2016

Valid from	2021-07-05
Valid until	2024-07-04
Registration no.	D1043500084
Report no.	P21-00826-205639
Stuttgart	2021-06-23



Head of Certification Body

