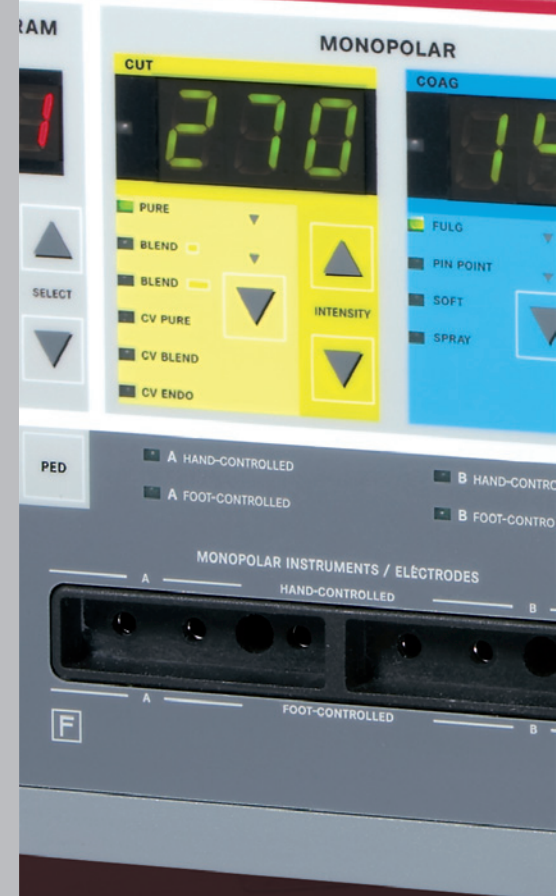




ELECTRO SURGERY



Elektro Chirurgie
Electro surgery

Eléctrochirurgie
Electro-Cirurgía
Elettrobisturi

Katalog
Catalogue
Catalogue
Catálogo
Catalogo


No. **212**

Kataloge
Catalogues

Catalogues
Catálogos
Cataloghi

Endoskopie
Endoscopy

Endoscopia
Endoscopia
Endoscopia



Geräte
Units
Appareils
Equipos
Apparecchi

ENDOSCOPY No. 205



Sinuskopie
Sinuscopy
Sinuscopie
Sinuscopia
Sinuscopia

ENDOSCOPY No. 211



Optiken
Scopes
Optiques
Ópticas
Ottiche

ENDOSCOPY No. 206




Mini & Mikro System für MIC
Mini & micro system for MIS
Système mini & mikro pour MIC
Sistema mini y micro para MIC
Sistema mini e micro per MIC

ENDOSCOPY No. 213



Laparoskopie
Laparoscopy
Laparoscopie
Laparoscopia
Laparoscopia

ENDOSCOPY No. 207



System zur lumbalen Diskektomie
Lumbar discectomy system
Système pour la discectomie lombaire
Sistema para la discectomia lumbar
Sistema per la discectomia lombare

ENDOSCOPY No. 601



Urologie
Urology
Urologie
Urología
Urologia

ENDOSCOPY No. 208


Sterilisation
Sterilization

Stérilisation
Esterilización
Sterilizzazione



Gynäkologie
Gynaecology
Gynécologie
Ginecología
Ginecologia

ENDOSCOPY No. 209




tekno-medical
Steril Container - System I
Sterile container - system I
Contenaires pour stérilisation - système I
Contenedores para esterilización - sistema I
Container per sterilizzazione - sistema I

STERILIZATION No. 302



Arthroskopie
Arthroscopy
Arthroscopie
Artroscopia
Artroscopia

ENDOSCOPY No. 210



Steril Container - System II
Sterile container - system II
Contenaires pour stérilisation - système II
Contenedores para esterilización - sistema II
Container per sterilizzazione - sistema II

STERILIZATION No. 303



Kataloge
Catalogues

Catalogues
Catálogos
Cataloghi

Chirurgie
Surgery

Chirurgie
Cirugía
Chirurgia

Hauptkatalog Chirurgie
Main catalogue surgery

Catalogue général
Catálogo general
Catalogo generale

SURGERY No. **111**

Aneurysmen Clips
Aneurysm clips

Clips pour anévrismes
Clips para aneurismas
Clips per aneurismi

SURGERY No. **134**

Plastische Chirurgie
Plastic surgery

Chirurgie plastique
Cirugía plástica
Chirurgia plastica

SURGERY No. **112**

HNO Hauptkatalog
ENT main catalogue

ORL catalogue général
ORL catálogo general
ORL catalogo generale

ENT No. **501**

Ophthalmologie
Ophthalmology

Ophthalmologie
Oftalmología
Oftalmologia

SURGERY No. **113**

Elektro Chirurgie
Electro surgery

Eléctrochirurgie
Electro-Cirugía
Elettrobisturi

Traumatologie
Traumatology

Traumatologie
Traumatología
Traumatologia

SURGERY No. **114**

Elektro Chirurgie
Electro surgery

Eléctrochirurgie
Electro-Cirugía
Elettrobisturi

ELECTRO SURGERY No. **212**

Gefäßschirurgie
Vascular surgery

Chirurgie vasculaire
Cirugía vascular
Chirurgia vascolare

SURGERY No. **115**

Dental
Dental

Dentaire
Dental
Dentale

Retraktor Systeme
Retractor systems

Systèmes des écarteurs
Sistema de retractores
Sistemi di retrattori

SURGERY No. **133**

Dental
Dental

Dentaire
Dental
Dentale

DENTAL No. **402**

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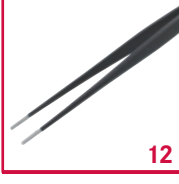
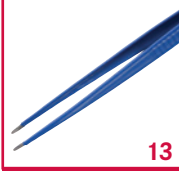

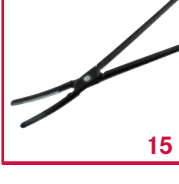



Electrodes

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General features

The high-performant TEKNO high-frequency surgical systems are suitable for all disciplines in endoscopic and open surgery. By pushing just one button, the surgeon gets the desired program.

Clear structured front panels make working with the TEKNO units easy. Each unit is controlled by two independent micro-processors, checking permanently all security relevant signals and record and measure out reliably emitted performance. All differences are indicated visually and acoustically.

The surgeon can fully concentrate on the intervention and complete it safe, quickly and gentle for the patient.

Characteristics

- clear structured front panels
- up to 99 easy retrievable memories, 89 of them individually programmable and up to 10 preset programs
- two monopolar and two bipolar outputs (depending on the unit)
- up to 17 different currents for all indications and operations
- up to three monopolar cutting currents with dynamic output control
- up to three monopolar tension controlled cutting currents (CV "constant voltage")
- up to four monopolar coagulation currents, including MICRO, MACRO and
- SEALING for a reliable vessel sealing
- bipolar coagulation with automatic start/stop function
- active control of HF leakage currents to prevent undesired HF irritations
- graded control of the correct positioning of the neutral electrode (REM electrode)
- double security due to two independent micro-processors
- memorizing of the last 32 error codes for a quick evaluation of error causes.





TOM 412A
HF-units with inbuilt argonbeamer

TOM 412A
tk 90010-00

ACCESSORY SET
tk 90011-50

see page 24



MONOPOLAR CUTTING

	PURE	BLEND "SOFT"	BLEND "STRONG"	CV PURE	CV BLEND	CV ENDO
Max. output power	400 W	300 W	130 W	400 W	300 W	250 W
Rated load	340 Ω	340 Ω	650 Ω	340 Ω	340 Ω	340 Ω
Vpp	3470	3620	7650	1480	1950	1870
Crest factor	1.6	2.35	8.4	1.6	2.35	2.15
Power control	Dynamic power control according to the impedances of tissues			Fully automatic output power control according to the impedances of tissues		

- PURE** - Pure cut without coagulating effect
- BLEND "SOFT"** - Cut blended with a medium coagulating effect
- BLEND "STRONG"** - Cut blended with a strong spray coagulating effect
- CV PURE** - "Constant voltage" pure cut without coagulating effect
- CV BLEND** - "Constant voltage" cut, blended with a low coagulating effect
- CV ENDO** - "Constant voltage" pure cut with alternating phases of coagulation for flexible endoscopy

MONOPOLAR COAGULATION

	FULG	PIN POINT	SOFT	SPRAY	ARGON GAS COAGULATION
Max. output power	140 W	250 W	270 W	130 W	130 W
Rated load	340 Ω	240 Ω	240 Ω	650 Ω	650 Ω
Vpp	4680	3450	3420	7700	7700
Crest factor	4.5	2.6	2.4	8.5	8.5
Power control	Dynamic power control according to the impedances of tissues				Dynamic power control according to the impedances of tissues and gas flow (Argon section must be activated)

- FULG** - Contact free high voltage coagulation
- PIN POINT** - Medium voltage coagulation
- SOFT** - Contact, low voltage coagulation
- SPRAY** - Contact free high voltage coagulation
- ARGON GAS COAGULATION** - Contact free, very high voltage, argon gas enhanced coagulation



BIPOLAR CUTTING

	PURE	SALINE
Max. output power	160 W	160 W
Rated load	300 Ω	280 Ω
Vpp	870	890
Crest factor	1.55	1.6
Power control	Dynamic power control according to the impedances of tissues	

PURE - Pure cut with low coagulating effect

SALINE - Pure cut for endoscopic use in saline solution e.g. bipolar TURP, TURV

BIPOLAR COAGULATION

	MICRO	AUTO	FORCED MICRO	MACRO	SEALING
Max. output power	120 W	120 W	120 W	120 W	120 W
Rated load	100 Ω	100 Ω	100 Ω	100 Ω	100 Ω
Vpp	430	430	740	760	720
Crest factor	1.75	1.75	1.75	1.76	1.74
Power control	Fully automatic power control according to the impedances of tissues		Dynamic power control according to the impedances of tissues		

MICRO - Micro coagulation

AUTO - Micro coagulation with "impedance sensing" auto start/stop function

FORCED MICRO - Micro coagulation

MACRO - Macro coagulation

SEALING - Strong macro coagulation for coagulation of big vessels and for minimal invasive procedure with "impedance sensing" auto start/stop function

TECHNICAL DATA

Power supply	230/115 VAC ± 10%; 50/60 Hz
Power consumption	max. power: 830 VA / switching on: 860 VA / stand-by: 110 VA
Frequency	450 KHz ± 3%
Main switch	green, situated on the front panel
Main fuses	2, situated on the rear side (T5A)
Protective earth resistance	resistance lower than 0,1Ω (in compliance with IEC 601-1)
Equipotential connection	DIN 42801, international plug
Cooling	by convection
Outputs	2x monopolar, 2x bipolar, 1x Argon gas (1 - 15 liter/min)
Memories	99
Safety class	Class 1
Type	CF
Classification 93/42 CEI/EEC	IIB
Dimensions (WxDxH)	400 x 400 x 180 mm
Weight	18 kg
Housing and front panel	metal case, painted and protected against the seeping in of liquids. Front panel with integrated push-buttons

TOM 212A
HF-Units with inbuilt argonbeamer

TOM 212A

tk 90011-00

ACCESSORY SET

tk 90011-50

see page 24



MONOPOLAR CUTTING

	PURE	BLEND "SOFT"	BLEND "STRONG"	CV PURE	CV BLEND	CV ENDO
Max. output power	270 W	270 W	130 W	270 W	270 W	250 W
Rated load	340 Ω	340 Ω	650 Ω	340 Ω	340 Ω	340 Ω
Vpp	3440	3520	7650	1480	1950	1880
Crest factor	1.6	2.35	8.4	1.6	2.4	2.1
Power control	Dynamic power control according to the impedances of tissues			Fully automatic output power control according to the impedances of tissues		

- PURE** - Pure cut without coagulating effect
- BLEND "SOFT"** - Cut blended with a medium coagulating effect
- BLEND "STRONG"** - Cut blended with a strong spray coagulating effect
- CV PURE** - "Constant voltage" pure cut without coagulating effect
- CV BLEND** - "Constant voltage" cut, blended with a low coagulating effect
- CV ENDO** - "Constant voltage" pure cut with alternating phases of coagulation for flexible endoscopy

MONOPOLAR COAGULATION

	FULG	PIN POINT	SOFT	SPRAY	ARGON GAS COAGULATION
Max. output power	140 W	250 W	270 W	130 W	130 W
Rated load	340 Ω	260 Ω	240 Ω	650 Ω	650 Ω
Vpp	4720	3450	3440	7700	7700
Crest factor	4.55	2.56	2.4	8.5	8.5
Power control	Dynamic power control according to the impedances of tissues				Dynamic power control according to the impedances of tissues and gas flow (Argon section must be activated)

- FULG** - Contact free high voltage coagulation
- PIN POINT** - Medium voltage coagulation
- SOFT** - Contact, low voltage coagulation
- SPRAY** - Contact free high voltage coagulation
- ARGON GAS COAGULATION** - Contact free, very high voltage, argon gas enhanced coagulation



BIPOLAR CUTTING

	PURE	SALINE
Max. output power	160 W	160 W
Rated load	300 Ω	280 Ω
Vpp	870	890
Crest factor	1.55	1.6
Power control	Dynamic power control according to the impedances of tissues	

PURE - Pure cut with low coagulating effect

SALINE - Pure cut for endoscopic use in saline solution e.g. bipolar TURP, TURV

BIPOLAR COAGULATION

	MICRO	AUTO	FORCED MICRO	MACRO	SEALING
Max. output power	120 W	120 W	120 W	120 W	120 W
Rated load	100 Ω	100 Ω	100 Ω	100 Ω	100 Ω
Vpp	430	430	740	760	720
Crest factor	1.75	1.75	1.75	1.76	1.74
Power control	Fully automatic power control according to the impedances of tissues		Dynamic power control according to the impedances of tissues		

MICRO - Micro coagulation

AUTO - Identical to MICRO current, but with "impedance sensing" auto start/stop function

FORCED MICRO - Micro coagulation

MACRO - Macro coagulation

SEALING - Strong macro coagulation for coagulation of big vessels and for minimal invasive procedure with "impedance sensing" auto start/stop function

TECHNICAL DATA

Power supply	230/115 VAC ± 10%; 50/60 Hz
Power consumption	max. power: 830 VA / switching on: 860 VA / stand-by: 110 VA
Frequency	450 KHz ± 3%
Main switch	green, situated on the front panel
Main fuses	2, situated on the rear side (T5A)
Protective earth resistance	resistance lower than 0,1Ω (in compliance with IEC 601-1)
Equipotential connection	DIN 42801, international plug
Cooling	by convection
Outputs	2x monopolar, 2x bipolar, 1x Argon gas (1- 15 liter/min)
Memories	99
Safety class	Class 1
Type	CF
Classification 93/42 CEI/EEC	IIB
Dimensions (WxDxH)	400 x 400 x 180 mm
Weight	18 kg
Housing and front panel	metal case, painted and protected against the seeping in of liquids. Front panel with integrated push-buttons

**TOM 412
HF-Units**

TOM 412
tk 90010-02

ACCESSORY SET
tk 90010-50

see page 24


**MONOPOLAR
CUTTING**

	PURE	BLEND "SOFT"	BLEND "STRONG"	CV PURE	CV BLEND	CV ENDO
Max. output power	400 W	300 W	130 W	400 W	300 W	250 W
Rated load	340 Ω	340 Ω	650 Ω	340 Ω	340 Ω	340 Ω
V _{pp}	3470	3620	7650	1480	1950	1870
Crest factor	1.6	2.35	8.4	1.6	2.35	2.15
Power control	Dynamic power control according to the impedances of tissues			Fully automatic output power control according to the impedances of tissues		

- PURE** - Pure cut without coagulating effect
BLEND "SOFT" - Cut blended with a medium coagulating effect
BLEND "STRONG" - Cut blended with a strong spray coagulating effect
CV PURE - "Constant voltage" pure cut without coagulating effect
CV BLEND - "Constant voltage" cut, blended with a low coagulating effect
CV ENDO - "Constant voltage" pure cut with alternating phases of coagulation for flexible endoscopy

**MONOPOLAR
COAGULATION**

	FULG	PIN POINT	SOFT	SPRAY
Max. output power	140 W	250 W	270 W	130 W
Rated load	340 Ω	240 Ω	240 Ω	650 Ω
V _{pp}	4680	3450	3420	7700
Crest factor	4.5	2.6	2.4	8.5
Power control	Dynamic power control according to the impedances of tissues			

- FULG** - Contact free high voltage coagulation
PIN POINT - Medium voltage coagulation
SOFT - Contact, low voltage coagulation
SPRAY - Contact free high voltage coagulation



BIPOLAR CUTTING

	PURE	SALINE
Max. output power	160 W	160 W
Rated load	300 Ω	280 Ω
Vpp	870	890
Crest factor	1.55	1.6
Power control	Dynamic power control according to the impedances of tissues	

PURE - Pure cut with low coagulating effect

SALINE - Pure cut for endoscopic use in saline solution e.g. bipolar TURP, TURV

BIPOLAR COAGULATION

	MICRO	AUTO	FORCED MICRO	MACRO	SEALING
Max. output power	120 W	120 W	120 W	120 W	120 W
Rated load	100 Ω	100 Ω	100 Ω	100 Ω	100 Ω
Vpp	430	430	740	760	720
Crest factor	1.75	1.75	1.75	1.76	1.74
Power control	Fully automatic power control according to the impedances of tissues		Dynamic power control according to the impedances of tissues		

MICRO - Micro coagulation

AUTO - Micro coagulation with "impedance sensing" auto start/stop function

FORCED MICRO - Micro coagulation

MACRO - Macro coagulation

SEALING - Strong macro coagulation for coagulation of big vessels and for minimal invasive procedure with "impedance sensing" auto start/stop function

TECHNICAL DATA

Power supply	230/115 VAC ± 10%; 50/60 Hz
Power consumption	max. power: 830 VA / switching on: 860 VA / stand-by: 110 VA
Frequency	450 KHz ± 3%
Main switch	green, situated on the front panel
Main fuses	2, situated on the rear side (T5A)
Protective earth resistance	resistance lower than 0,1Ω (in compliance with IEC 601-1)
Equipotential connection	DIN 42801, international plug
Cooling	by convection
Outputs	2x monopolar, 2x bipolar
Memories	99
Safety class	Class 1
Type	CF
Classification 93/42 CEI/EEC	II B
Dimensions (WxDxH)	400 x 400 x 180 mm
Weight	18 kg
Housing and front panel	metal case, painted and protected against the seeping in of liquids. Front panel with integrated push-buttons

TOM 411
HF-Units

TOM 411
tk 90010-04

ACCESSORY SET
tk 90010-50

see page 24



MONOPOLAR CUTTING

	PURE	BLEND "SOFT"	BLEND "STRONG"	ENDO
Max. output power	400 W	300 W	130 W	250 W
Rated load	340 Ω	340 Ω	650 Ω	340 Ω
Vpp	3470	3620	7650	1870
Crest factor	1.6	2.35	8.4	2.15
Power control	Dynamic power control according to the impedances of tissues			Fully automatic output power control according to the impedances of tissues

- PURE** - Pure cut without coagulating effect
- BLEND "SOFT"** - Cut blended with a medium coagulating effect
- BLEND "STRONG"** - Cut blended with a strong spray coagulating effect
- ENDO** - Pure cut with alternating phases of coagulation for flexible endoscopy

MONOPOLAR COAGULATION

	FULG	PIN POINT	SOFT	SPRAY
Max. output power	140 W	250 W	270 W	130 W
Rated load	340 Ω	240 Ω	240 Ω	650 Ω
Vpp	4680	3450	3420	7700
Crest factor	4.5	2.6	2.4	8.5
Power control	Dynamic power control according to the impedances of tissues			

- FULG** - Contact free high voltage coagulation
- PIN POINT** - Medium voltage coagulation
- SOFT** - Contact, low voltage coagulation
- SPRAY** - Contact free high voltage coagulation



BIPOLAR CUTTING

	PURE	BLEND
Max. output power	140 W	110 W
Rated load	300 Ω	280 Ω
Vpp	860	840
Crest factor	1.55	1.6
Power control	Dynamic power control according to the impedances of tissues	

PURE - Pure cut with low coagulating effect

BLEND - Blend cut with stronger coagulating effect

BIPOLAR COAGULATION

	MICRO	AUTO	MACRO
Max. output power	110 W	110 W	110 W
Rated load	100 Ω	100 Ω	100 Ω
Vpp	390	390	740
Crest factor	1.75	1.75	1.76
Power control	Fully automatic power control according to the impedances of tissues	Dynamic power control according to the impedances of tissues	

MICRO - Micro coagulation

AUTO - Micro coagulation with "impedance sensing" auto start/stop function

MACRO - Macro coagulation

TECHNICAL DATA

Power supply	230/115 VAC ± 10%; 50/60 Hz
Power consumption	max. power: 830 VA / switching on: 860 VA / stand-by: 110 VA
Frequency	450 KHz ± 3%
Main switch	green, situated on the front panel
Main fuses	2, situated on the rear side (T5A)
Protective earth resistance	resistance lower than 0,1Ω (in compliance with IEC 601-1)
Equipotential connection	DIN 42801, international plug
Cooling	by convection
Outputs	2x monopolar, 1x bipolar
Safety class	Class 1
Type	CF
Classification 93/42 CEI/EEC	II B
Memories	9
Dimensions (WxDxH)	400 x 400 x 180 mm
Weight	18 kg
Housing and front panel	metal case, painted and protected against the seeping in of liquids. Front panel with integrated push-buttons

TOM 212
HF-Units

TOM 212
tk 90011-02

ACCESSORY SET
tk 90010-50

see page 24



MONOPOLAR CUTTING

	PURE	BLEND "SOFT"	BLEND "STRONG"	CV PURE	CV BLEND	CV ENDO
Max. output power	270 W	270 W	130 W	270 W	270 W	250 W
Rated load	340 Ω	340 Ω	650 Ω	340 Ω	340 Ω	340 Ω
Vpp	3440	3520	7650	1480	1950	1880
Crest factor	1.6	2.35	8.4	1.6	2.4	2.1
Power control	Dynamic power control according to the impedances of tissues			Fully automatic output power control according to the impedances of tissues		

- PURE** - Pure cut without coagulating effect
- BLEND "SOFT"** - Cut blended with a medium coagulating effect
- BLEND "STRONG"** - Cut blended with a strong spray coagulating effect
- CV PURE** - "Constant voltage" pure cut without coagulating effect
- CV BLEND** - "Constant voltage" cut, blended with a low coagulating effect
- CV ENDO** - "Constant voltage" pure cut with alternating phases of coagulation for flexible endoscopy

MONOPOLAR COAGULATION

	FULG	PIN POINT	SOFT	SPRAY
Max. output power	140 W	250 W	270 W	130 W
Rated load	340 Ω	260 Ω	240 Ω	650 Ω
Vpp	4720	3450	3440	7700
Crest factor	4.55	2.56	2.4	8.5
Power control	Dynamic power control according to the impedances of tissues			

- FULG** - Contact free high voltage coagulation
- PIN POINT** - Medium voltage coagulation
- SOFT** - Contact, low voltage coagulation
- SPRAY** - Contact free high voltage coagulation



BIPOLAR CUTTING

	PURE	SALINE
Max. output power	160 W	160 W
Rated load	300 Ω	280 Ω
Vpp	870	890
Crest factor	1.55	1.6
Power control	Dynamic power control according to the impedances of tissues	

PURE - Pure cut with low coagulating effect
SALINE - Pure cut for endoscopic use in saline solution e.g. bipolar TURP, TURV

BIPOLAR COAGULATION

	MICRO	AUTO	FORCED MICRO	MACRO	SEALING
Max. output power	120 W	120 W	120 W	120 W	120 W
Rated load	100 Ω	100 Ω	100 Ω	100 Ω	100 Ω
Vpp	430	430	740	760	720
Crest factor	1.75	1.75	1.75	1.76	1.74
Power control	Fully automatic power control according to the impedances of tissues		Dynamic power control according to the impedances of tissues		

MICRO - Micro coagulation
AUTO - Micro coagulation with "impedance sensing" auto start/stop function
FORCED MICRO - Micro coagulation
MACRO - Macro coagulation
SEALING - Strong macro coagulation for coagulation of big vessels and for minimal invasive procedure with "impedance sensing" auto start/stop function

TECHNICAL DATA

Power supply	230/115 VAC ± 10%; 50/60 Hz
Power consumption	max. power: 830 VA / switching on: 860 VA / stand-by: 110 VA
Frequency	450 KHz ± 3%
Main switch	green, situated on the front panel
Main fuses	2, situated on the rear side (T5A)
Protective earth resistance	resistance lower than 0,1Ω (in compliance with IEC 601-1)
Equipotential connection	DIN 42801, international plug
Cooling	by convection
Outputs	2x monopolar, 2x bipolar
Safety class	Class 1
Type	CF
Classification 93/42 CEI/EEC	IIB
Memories	99
Dimensions (WxDxH)	400 x 400 x 180 mm
Weight	18 kg
Housing and front panel	metal case, painted and protected against the seeping in of liquids. Front panel with integrated push-buttons

TOM 211
HF-Units

TOM 211
tk 90011-04

ACCESSORY SET
tk 90010-50

see page 24



MONOPOLAR CUTTING

	PURE	BLEND "SOFT"	BLEND "STRONG"	ENDO
Max. output power	200 W	200 W	130 W	200 W
Rated load	340 Ω	340 Ω	650 Ω	340 Ω
Vpp	3440	3480	7650	1860
Crest factor	1.6	2.35	8.4	2.2
Power control	Dynamic power control according to the impedances of tissues			Fully automatic output power control according to the impedances of tissues

- PURE** - Pure cut without coagulating effect
- BLEND "SOFT"** - Cut blended with a medium coagulating effect
- BLEND "STRONG"** - Cut blended with a strong spray coagulating effect
- ENDO** - Pure cut with alternating phases of coagulation for flexible endoscopy

MONOPOLAR COAGULATION

	FULG	PIN POINT	SOFT	SPRAY
Max. output power	140 W	200 W	200 W	130 W
Rated load	340 Ω	260 Ω	240 Ω	650 Ω
Vpp	4720	3390	3000	7700
Crest factor	4.55	2.56	2.45	8.5
Power control	Dynamic power control according to the impedances of tissues			

- FULG** - Contact free high voltage coagulation
- PIN POINT** - Medium voltage coagulation
- SOFT** - Contact, low voltage coagulation
- SPRAY** - Contact free high voltage coagulation



BIPOLAR CUTTING

	PURE	BLEND
Max. output power	140 W	110 W
Rated load	300 Ω	280 Ω
Vpp	860	840
Crest factor	1.55	1.6
Power control	Dynamic power control according to the impedances of tissues	

PURE - Pure cut with low coagulating effect

BLEND - Blend cut with stronger coagulation effect

BIPOLAR COAGULATION

	MICRO	AUTO	MACRO
Max. output power	110 W	110 W	110 W
Rated load	100 Ω	100 Ω	100 Ω
Vpp	390	390	740
Crest factor	1.75	1.75	1.76
Power control	Fully automatic power control according to the impedances of tissues	Dynamic power control according to the impedances of tissues	

MICRO - Micro coagulation

AUTO - Micro coagulation with "impedance sensing" auto start/stop function

MACRO - Macro coagulation

TECHNICAL DATA

Power supply	230/115 VAC ± 10%; 50/60 Hz
Power consumption	max. power: 830 VA / switching on: 860 VA / stand-by: 110 VA
Frequency	450 KHz ± 3%
Main switch	green, situated on the front panel
Main fuses	2, situated on the rear side (T5A)
Protective earth resistance	resistance lower than 0,1 Ω (in compliance with IEC 601-1)
Equipotential connection	DIN 42801, international plug
Cooling	by convection
Outputs	2x monopolar, 1x bipolar
Safety class	Class 1
Type	CF
Classification 93/42 CEI/EEC	IIB
Memories	9
Dimensions (WxDxH)	400 x 400 x 180 mm
Weight	18 kg
Housing and front panel	metal case, painted and protected against the seeping in of liquids. Front panel with integrated push-buttons

Technical features of small HF-units



Functioning control and output power control

Complete and permanent control by microprocessor, interfaced with highspeed analogue/digital converters for checking controls. Output control with automatic and dynamic adjustment by a microprocessor-controlled, specific circuit (ADC system), with feedback unit/patient tissue (7000 times/sec).

Micro-progressive power settings, step by step, by keys with indication 01'1 on the display.

Neutral electrode safety system

Controlled by a microprocessor.

Specific circuit with alarm warning (red signal and high-pitched intermittent sound) and output stop in case of absence of connection or bad contact between electrode and tissue is detected.

Single footswitch control

With monopolar pencil or bipolar electrode. One output selection button.

No display (TEKNO TOM 141).

Double footswitch control

With monopolar pencil and bipolar electrode or manual control with monopolar pencil with twin buttons (TEKNO TOM 141 DPS).

Automatic and dynamic output adjustment

Controlled by a specific circuit software, able to perform continuous feedback between HF-unit and the patient's tissue and optimised function. The output power is automatically adjusted according to the impedances (type of tissue), the electrode in use or the process speed.



TOM 141 DPS
Small HF-units

TOM 141 DPS

240 V	tk 90005-00
110 V	tk 90005-01

ACCESSORY SET

tk 90005-50

see page 24



MONOPOLAR CUTTING

	PURE	BLEND
Max. output power	140 W	120 W
Rated load	500 Ω	500 Ω
Vpp	1200	1450
Crest factor	1.7	2.8

PURE - Pure cut without coagulating effect

BLEND - Cut blended with a medium coagulating effect

BIPOLAR COAGULATION

	COAG
Max. output power	100 W
Rated load	100 Ω
Vpp	400
Crest factor	1.4

COAG - Contact, low voltage coagulation

MONOPOLAR COAGULATION

	FULG	SOFT
Max. output power	120 W	60 W
Rated load	500 Ω	200 Ω
Vpp	2770	1420
Crest factor	6.9	2.8

FULG - Contact free high voltage coagulation

SOFT - Contact, low voltage coagulation

TECHNICAL DATA

Power supply	230/115 VAC ± 10%; 50/60 Hz
Power consumption	245 VA
Nominal frequency of HF currents	470 kHz
Main fuses	2, situated on the rear side
Equipotential connection	DIN connector
Cooling	by convection
Outputs	1x monopolar, 1x bipolar
EC approval and classification	IIb according to EC-93/42 EEC
Safety class	Class 1 according to CEI EN 60601-2-2
Type	CF according to IEC 60601-1 (Leakages less than 10 microA)
Dimensions (WxDxH)	300 x 255 x 120 mm
Weight	5 kg

TOM 141
Small HF-units
TOM 141

240 V	tk 90004-00
110 V	tk 90004-01

ACCESSORY SET
tk 90004-50
see page 24

MONOPOLAR CUTTING

	PURE	BLEND
Max. output power	140 W	120 W
Rated load	500 Ω	500 Ω
Vpp	1200	1450
Crest factor	1.7	2.8

PURE - Pure cut without coagulating effect

BLEND - Cut blended with a medium coagulating effect

MONOPOLAR COAGULATION

	FULG	SOFT
Max. output power	120 W	60 W
Rated load	500 Ω	200 Ω
Vpp	2770	1420
Crest factor	6.9	2.8

FULG - Contact free high voltage coagulation

SOFT - Contact, low voltage coagulation

BIPOLAR COAGULATION

	COAG
Max. output power	100 W
Rated load	100 Ω
Vpp	400
Crest factor	1.4

COAG - Contact, low voltage coagulation

TECHNICAL DATA

Power supply	230/115 VAC ± 10%; 50/60 Hz
Power consumption	245 VA
Nominal frequency of HF currents	470 kHz
Main fuses	2, situated on the rear side
Equipotential connection	DIN connector
Cooling	by convection
Outputs	1x monopolar, 1x bipolar
EC approval and classification	IIb according to EC-93/42 EEC
Safety class	Class 1 according to CEI EN 60601-2-2
Type	CF according to IEC 60601-1 (Leakages less than 10 microA)
Dimensions (WxDxH)	280 x 255 x 120 mm
Weight	4.7 kg



TOM 80
Small HF-units

TOM 80

240 V	tk 90006-00
110 V	tk 90006-01

ACCESSORY SET

tk 90006-50

see page 24



MONOPOLAR CUTTING

	PURE	BLEND
Max. output power	80 W	80 W
Rated load	500 Ω	500 Ω
V _{pp}	1000	1420
Crest factor	1.7	2.8

PURE - Pure cut without coagulating effect

BLEND - Cut blended with a medium coagulating effect

BIPOLAR COAGULATION

	COAG
Max. output power	60 W
Rated load	100 Ω
V _{pp}	400
Crest factor	1.4

COAG - Contact, low voltage coagulation

MONOPOLAR COAGULATION

	COAG	COAG MICRO
Max. output power	80 W	60 W
Rated load	500 Ω	200 Ω
V _{pp}	1950	1420
Crest factor	6.9	2.8

COAG - Contact free high voltage coagulation

COAG

MICRO - Low voltage contact coagulation

TECHNICAL DATA

Power supply	230/115 VAC ± 10%; 50/60 Hz
Power consumption	max. power: 175 VA switching on: 320 VA standby: 100 mA
Nominal frequency of HF currents	475 kHz (monopolar and bipolar)
Main fuses	1,6 A-T (2, one for each phase)
Cooling	without fan, by convection
Outputs	1x monopolar, 1x bipolar
EC approval and classification	Class IIB according to EC 93/42/CEE
Safety class	Class I according to IEC 601-1
Type	CF according to IEC 601-1
Output circuits	Floating circuit according to IEC 601-2-2
Dimensions (WxDxH)	230 x 240 x 100 mm
Weight	4.75 kg

Accessories sets for HF units
STANDARD SETS

For TEKNO TOM	TOM 211, 212, 411, 412		TOM 212A, 412A			TOM 141 DPS		TOM 141	
	Standard		Argon			Standard		Standard	
	tk 90010-50	tk 90010-60	Basic	LAS	Gastro	tk 90005-50	tk 90005-60	tk 90004-50	tk 90004-60
tk 90011-50			tk 90011-51	tk 90011-52					
Handle insertion in mm	Ø 2.4	Ø 4.0				Ø 2.4	Ø 4.0	Ø 2.4	Ø 4.0
Double pedal switch, UNIVERSAL	tk 90016-00	x	x	x	x	x			
Pneumatic pedal switch, monopolar	tk 90018-00							x	x
Pneumatic double pedal switch, monopolar	tk 90019-00					x	x		
Electrode Handle with manual control	tk 90020-00	x		x	x	x			
Electrode Handle with manual control	tk 90030-01		x				x		
Argon Electrode Handle with manual control	tk 90301-10			x	x	x			
Electrode Handle without manual control	tk 90021-00	x		x	x	x		x	
Electrode Handle without manual control	tk 90031-00								x
Knife electrodes (2x)	tk 90022-01	x		x	x	x		x	
Knife electrodes (2x)	tk 90032-01		x				x		x
Knife electrode, rigid, 40 mm	tk 90301-16			x	x	x			
Knife electrodes, 100mm	tk 90022-05	x		x	x	x			
Rhombic knife electrode	tk 90032-02		x						
Needle electrode, thick	tk 90023-01	x		x	x	x		x	
Needle electrode, thick	tk 90033-01		x				x		x
Needle electrode, thin	tk 90023-02	x		x	x	x		x	
Needle electrode, thin	tk 90033-02		x				x		x
Ball electrode, Ø 2.5 mm	tk 90024-01	x		x	x	x		x	
Ball electrode, Ø 4.0 mm	tk 90034-01		x				x		x
Ball electrode, Ø 4.0 mm	tk 90024-02	x		x	x	x		x	
Ball electrode, Ø 6.0 mm	tk 90034-02		x				x		x
Loop electrode, Ø 5.0 mm	tk 90025-01	x		x	x	x			
Loop electrode, Ø 10.0 mm	tk 90035-01		x						
Coagulation electrode, rigid, 25 mm	tk 90301-11			x	x	x			
Coagulation electrode, rigid, 100 mm	tk 90301-12			x					
Coagulation electrode, rigid, 320 mm	tk 90301-13				x				
Disposable neutral electrode with cable, sterile	tk 90029-16	x	x	x	x	x			
Neutral electrode with cable	tk 90029-20						x	x	x
Fixing belt for neutral electrodes	tk 90029-50						x	x	x
Cable for flexible electrode, 2.5 m	tk 90301-18					x			
Tube for gas input with quick-action coupling	tk 90302-14			x	x	x			

Illustration and description, please see pages 28-35



STANDARD SETS

For TEKNO TOM	TOM 80								bipolar
	monopolar							tk 900006-90	
	Standard		Dental			tk 900006-85			
	tk 900006-50	tk 900006-55	Standard	Maxillofacial	Surgery				
		tk 900006-60	tk 900006-70	tk 900006-75	tk 900006-80	tk 900006-85			
Handle insertion in mm	Ø 2.4	Ø 4.0	Ø 1.6	Ø 2.4	Ø 4.0	Ø 1.6 & 2.4	Ø 1.6 & 4.0		
Electrode Handle w/o manual control	tk 90021-20		x			x	x		
ElectrodeHandle w/o manual control	tk 90021-00	x			x	x			
ElectrodeHandle w/o manual control	tk 90031-00		x		x		x		
Hand neutral plate	tk 90029-30		x			x	x		
Neutral plate, stainless steel	tk 90029-20	x	x		x	x	x		
Fixing belt for tk 90029-20	tk 90029-60	x	x		x	x	x		
Needle electrode, thin	tk 90014-01		x			x	x		
Needle electrode, 45°, thin	tk 90014-02		x			x	x		
Needle electrode, 45°, thick	tk 90014-04		x			x	x		
Loop electrode, Ø 5 mm	tk 90014-07		x			x	x		
Loop electrode, oval, Ø 5 mm	tk 90014-11		x			x	x		
Ball electrode, 45°, Ø 3 mm	tk 90014-20		x			x	x		
Knife electrodes (2x)	tk 90022-01	x				x	x		
Knife electrodes (2x)	tk 90032-01		x						
Needle electrode, thin	tk 90023-02	x				x			
Needle electrode, thin	tk 90033-03		x				x		
Needle electrode, thick	tk 90023-01	x			x	x			
Needle electrode, thick	tk 90033-01		x		x		x		
Needle electrode, 45°, thick	tk 90023-03				x				
Needle electrode, 45°, thick	tk 90033-06					x			
Ball electrode, Ø 2 mm	tk 90024-01	x			x	x			
Ball electrode, Ø 2 mm	tk 90034-00		x			x	x		
Ball electrode, 45°, Ø 2 mm	tk 90034-07				x				
Ball electrode, 45°, Ø 2 mm	tk 90034-15					x			
Ball electrode, Ø 4.0 mm	tk 90024-02	x				x			
Ball electrode, Ø 4.0 mm	tk 90034-01		x				x		
Loop electrode, Ø 5 mm	tk 90025-01				x	x			
Loop electrode, Ø 5 mm	tk 90035-02					x	x		
Pneumatic footswitch	tk 90018-00	x	x	x	x	x	x	x	
Bipolar cable, 3m	tk 707-338							x	
Bipolar forceps	tk 90101-16							x	

Illustration and description, please see pages 28-35

Smoke evacuation system



	Smoke evacuation system	Smoke evacuation system PRO	ENDOEVAC
with footswitch	tk 90300-18	tk 90300-19	tk 90300-30
without footswitch	tk 90300-20	tk 90300-21	-
Application	Surgical gynaecology; open surgery	Surgical gynaecology; open surgery; Endoscopy (Laparoscopy)	Endoscopic Laparoscopy
Connection for an external vacuum system	-	x	x

- Independent electrical suction pump with high air flow rate up to 6000 l/hour
- The unit can be combined with all HF-units on the market, monopolar and bipolar
- Automatic mode - Each time the electrosurgical unit is activated the smoke evacuation system starts working
- Adjustable flow rate with "turbo" function
- Suction is switched off with a delay function, adjustable from 1-30sec.
- Smoke filtering system at three stages:
 1. External sterile, disposable, antibacterial, antiviral filter
 2. Internal bacterial and antiviral HEPA filter
 3. Internal antismell "active carbon" filter
- The functioning of the unit is controlled by a microprocessor. Double check of the filter system, with alarm signal for non efficient filters, or exceeded filter life times

INCLUDED ACCESSORIES

	Smoke evacuation system	Smoke evacuation system PRO	ENDOEVAC
tk 90018-00	-	-	1 x
tk 90300-40	1 x	1 x	1 x
tk 90300-41	1 x	1 x	1 x
tk 90300-42	1 x	1 x	-
tk 90300-43	1 x	1 x	-
tk 90300-44	1 x	1 x	-
tk 90300-51	-	-	10 x

TECHNICAL DATAS

	Smoke evacuation system	Smoke evacuation system PRO	ENDOEVAC
Max. Vacuum	110 mmHg	720 / 730 mmHg	110 mmHg
Flow rate	3000 lt/hour	6000 lt/hour	500 lt/hour
Weight	15 kg	18 kg	16 kg
Dimensions (WxDxH)	390 x 400 x 210 mm		380 x 400 x 120 mm
Power supply	115/230 VAC ± 10%		230 VAC ± 10%
Power consumption	650 VA		35 VA
Main fuses	2, situated on the rear side		
Cooling	by fan		
EC approval and classification	IIa according to 93/42 EEC		
Safety class	Class 1 according to IEC EN 60601-1		
Type	BF according to IEC 60601-1		

Accessories for the smoke evacuation system



tk 90300-40	500 h
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1x Internal active carbon filter (antismell)



tk 90300-41	500 h
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1x Internal bacterial, antiviral HEPA filter



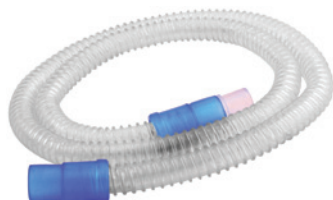
tk 90300-42

1x External/disposable bacterial, antiviral filter, single use



tk 90300-43	1,8m - Ø 11mm
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Disposable sterile tube to connect to a speculum or other suction systems as disposable handles with suction cannulae and even direct suction



tk 90300-44	1,5m - Ø 19mm
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Extension tube for tk 90300-43 and tk 90300-47, non sterile, single use



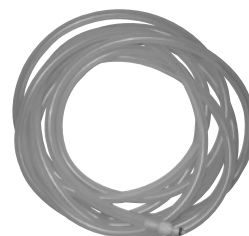
tk 90300-51	5m - Ø 7x11mm
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Sterile set consisting of a single use sterile filter and a silicone tube with LL connection.



tk 90300-47

Sterile sleeve for standard handles (box of 20 pieces), single use



tk 90300-50

Autoclavable connecting tube, complete with quick connector for the unit, but not equipped with connector to the centralized vacuum system because too many different connections are used

Footswitches



Universal (Mono-/Bipolar)	tk 90016-00	TOM 412A, 412, 411, 411PRO, 212A, 212, 211
Bipolar	tk 90017-00	TOM 412A, 412, 411, 212A, 212, 211

Footswitch

for use with unit



Monopolar / Bipolar	tk 90018-00	TOM 80, 141
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Pneumatic footswitch

for use with unit



Monopolar / Bipolar	tk 90019-00	TOM 141 DPS
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Pneumatic footswitch



Electrode handles



5m	Ø 2.4 mm	tk 90021-00	4mm plug
	Ø 4.0 mm	tk 90031-00	
<i>Cable length</i>	<i>Electrode port</i>	<i>Handle without manual control</i>	<i>Connection</i>



3m	Ø 2.4 mm	tk 90020-00	international model, 3 pin
	Ø 4.0 mm	tk 90030-01	
<i>Cable length</i>	<i>Electrode port</i>	<i>Handle without manual control</i>	<i>Connection</i>



	x = 150 mm
Ø 2.4 mm	tk 90038-01
Ø 4.0 mm	tk 90038-02
<i>Electrode port</i>	<i>Electrode extension</i>



Further electrode handles available on request

Electrodes



Shaft	Length	Knife	Rhombic knife, angled	Thin needle	Thick needle	Needle, angled
Ø 2.4 mm	x = 40 mm	2.5 x 20 mm tk 90022-01	1.6 x 20 mm tk 90022-03	Ø 0.5 x 20 mm tk 90023-02	Ø 0.8 x 20 mm tk 90023-01	Ø 0.8 x 20 mm tk 90023-03
	x = 130 mm	tk 90022-05	-	tk 90023-06	tk 90023-05	tk 90023-04
Ø 4.0 mm	x = 30 mm	tk 90032-01	tk 90032-03	tk 90033-03	tk 90033-01	tk 90033-06
	x = 130 mm	tk 90032-05	-	tk 90033-04	tk 90033-05	tk 90033-07



Shaft	Length	Ball	Ball, angled	Ball	Ball, angled	Ball
Ø 2.4 mm	x = 40 mm	Ø = 2.0 mm tk 90024-01	Ø = 2.0 mm tk 90034-07	Ø = 4.0 mm tk 90024-02	Ø = 4.0 mm tk 90034-11	Ø = 6.0 mm tk 90024-03
	x = 130 mm	tk 90024-06	tk 90034-10	tk 90024-07	tk 90034-12	tk 90024-08
Ø 4.0 mm	x = 30 mm	tk 90034-00	tk 90034-15	tk 90034-01	tk 90034-13	tk 90034-02
	x = 130 mm	tk 90034-04	tk 90034-16	tk 90034-05	tk 90034-14	tk 90034-06



		2.5 x 20 mm	2.5 x 20 mm	Ø = 5.0 mm	Ø = 10.0 mm	Ø = 14.0 mm
Ø 2.4 mm	x = 40 mm	tk 90034-08	tk 90034-09	tk 90025-01	tk 90025-02	tk 90025-03
	x = 130 mm	tk 90034-20	tk 90034-21	tk 90025-06	tk 90025-07	tk 90025-08
Ø 4.0 mm	x = 30 mm	tk 90034-22	tk 90034-23	tk 90035-02	tk 90035-01	tk 90035-03
	x = 130 mm	tk 90034-24	tk 90034-25	tk 90035-06	tk 90035-05	tk 90035-08

Shaft Length Spatula Spatula, angled Wire loop Wire loop Wire loop



		10 x 10 mm	15 x 15 mm	20 x 15 mm	20 x 20 mm	20 x 25 mm
Ø 2.4 mm	x = 150 mm	tk 90026-01	tk 90026-02	tk 90026-03	tk 90026-04	tk 90026-05
Ø 4.0 mm		tk 90027-01	tk 90027-02	tk 90027-03	tk 90027-04	tk 90027-05

Shaft Length Wire loop Wire loop Wire loop Wire loop Wire loop

Flexible electrodes



Ø 1.5 mm	1.5 m	tk 90301-19
Ø 2.3 mm	1.0 m	tk 90301-20
Ø 2.3 mm	2.2 m	tk 90301-21
Ø 2.3 mm	3.0 m	tk 90301-23
Ø 3.2 mm	2.2 m	tk 90301-22

Tip Working length Flexible electrode

Argon plasma electrodes



	x = 25 mm	x = 100 mm	x = 350 mm	x = 40 mm	x = 115 mm	x = 40 mm	x = 115 mm
Ø 4.0 mm	tk 90301-11	tk 90301-12	tk 90301-13	tk 90301-14	tk 90301-15	tk 90301-16	tk 90301-17
Shaft	Coagulation	Coagulation	Coagulation	Needle	Needle	Knife	Knife



Neutral plates



176 x 122 mm	for adults & children	tk 90029-16	TOM 412A, 412, 411, 411 Pro, 212A, 212, 211	TEKNO, Martin, Berchtold, Integra, Erbe T-series, ACC/ICC, VIO
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Sterile, 3.0m cable, split, Box of 8 pieces



3 m	tk 90029-05	TEKNO (excluding TOM 80), Martin, Berchtold, Integra, Erbe T-series, ACC/ICC, VIO
5 m	tk 90029-07	

Cable for disposable neutral plates



120 x 250 mm	for adults	tk 90029-00	TEKNO, Martin, Berchtold, Integra, Erbe T-series, ACC/ICC, VIO
80 x 180 mm	for children	tk 90029-01	

Gummed with 2.5m cable, reusable, autoclavable



60 x 135 mm		tk 90029-20	TEKNO, Martin, Berchtold, Integra, Erbe T-series, ACC/ICC, VIO
120 x 250 mm		tk 90029-22	

Stainless steel with 2.5m cable, reusable, soakable



ONLY TO USE WITH TEKNO TOM 80



Ø 17 mm -110 mm	TEKNO, Martin, Berchtold, Integra, Erbe T-series, ACC/ICC, VIO
tk 90029-30	

Hand neutral plate with 2.5m cable, reusable, soakable



tk 90029-60	500 mm
tk 90029-50	1500 mm

Fixing belt for neutral plates

Accessories for HF argon gas units



Ø 4.0 mm	3.5 m	tk 90301-10
<i>Electrode port Cable length Manual switch handle for rigid electrodes</i>		



2.5 m	tk 90301-18
<i>Cable for flexible electrodes</i>	



1.0 m	tk 90302-14
<i>Tube for gas input with quick-action coupling</i>	



tk 90302-24
<i>Filter</i>



tk 90302-25
<i>LL-Adaptor</i>



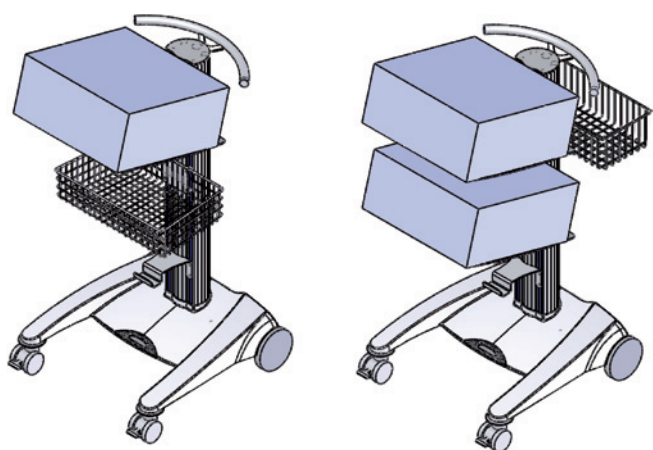
Pressure reducer for argon gas cylinder	tk 90302-13
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Argon gas cylinder, 5 L (empty)	tk 90302-12
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Trolleys



Trolley for TEKNO TOM units	tk 90295-01	tk 90295-02
	<i>one shelf</i>	<i>two shelves</i>

Accessories	tk 90295-21	tk 90295-20
	<i>holder for gas bottle / 5l (left)</i>	<i>stand for infussion bottles</i>



Trolley for TEKNO TOM units	tk 90295-00
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Trolley for ESU, TEKNO TOM and two 5 L cylinders	tk 90302-11
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Monopolar forceps



180 mm - 7"	tk 90200-18	tk 90201-18
210 mm - 8¼"	tk 90200-21	tk 90201-21
250 mm - 10"	tk 90200-25	tk 90201-25
	<i>serrated</i>	<i>1 x 2</i>



180 mm - 7"	tk 90210-18	tk 90211-18
210 mm - 8¼"	tk 90210-21	tk 90211-21
250 mm - 10"	tk 90210-25	tk 90211-25
<i>4 mm female connection</i>	<i>serrated</i>	<i>1 x 2</i>



Monopolar cables

High frequency cable, monopolar

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	

Unit side

Instrument side



TEKNO unit



2-8 mm Ø

Universal adapter for monopolar cables with pins from 2-8 mm Ø	tk 90302-21
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Bipolar forceps





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
	0.25 mm	0.6 mm
		
110 mm - 4¼"	tk 90051-11	tk 90052-11
		
110 mm - 4¼"	tk 90051-12	tk 90052-12
	<i>pointed</i>	<i>blunt</i>





	0.25 mm	0.6 mm
		
110 mm - 4¼"	tk 90054-11	tk 90055-11
		
110 mm - 4¼"	tk 90054-12	tk 90055-12
	<i>pointed , angled</i>	<i>blunt, angled</i>



	0.25 mm	0.6 mm
		
110 mm - 4¼"	-	tk 90058-11
120 mm - 4¾"	tk 90057-11	-
		
110 mm - 4¼"	-	tk 90058-12
120 mm - 4¾"	tk 90057-12	-
	<i>pointed, curved</i>	<i>blunt, curved</i>

	0.3 mm	1.0 mm	2.0 mm
			
160 mm - 6¼"	tk 90184-16	tk 90185-16	tk 90189-16
180 mm - 7"	tk 90184-18	tk 90185-18	tk 90189-18
200 mm - 8"	tk 90184-20	tk 90185-20	tk 90189-20
220 mm - 8¾"	tk 90184-22	tk 90185-22	tk 90189-22
240 mm - 9½"	tk 90184-24	tk 90185-24	tk 90189-24
			
180 mm - 7"	tk 90186-18	tk 90187-18	tk 90190-18
200 mm - 8"	tk 90186-20	tk 90187-20	tk 90190-20
220 mm - 8¾"	tk 90186-22	tk 90187-22	tk 90190-22
240 mm - 9½"	tk 90186-24	tk 90187-24	tk 90190-24
	<i>pointed</i>	<i>blunt</i>	<i>blunt</i>





	0.3mm	1.0 mm	2.0 mm
			
150 mm - 6 "	tk 90100-15	tk 90101-15	tk 90191-15
160 mm - 6¼ "	tk 90100-16	tk 90101-16	tk 90191-16
180 mm - 7 "	tk 90100-18	tk 90101-18	tk 90191-18
200 mm - 8 "	tk 90100-20	tk 90101-20	tk 90191-20
220 mm - 8¾ "	tk 90100-22	tk 90101-22	tk 90191-22
240 mm - 9½ "	tk 90100-24	tk 90101-24	tk 90191-24
300 mm - 12 "	tk 90100-30	tk 90101-30	-
			
150 mm - 6 "	tk 90102-15	tk 90103-15	tk 90192-15
180 mm - 7 "	tk 90102-18	tk 90103-18	tk 90192-18
200 mm - 8 "	tk 90102-20	tk 90103-20	tk 90192-20
220 mm - 8¾ "	tk 90102-22	tk 90103-22	tk 90192-22
240 mm - 9½ "	tk 90102-24	tk 90103-24	tk 90192-24

pointed

blunt

blunt



	0.3mm	1.0 mm	2.0 mm
			
150 mm - 6 "	tk 90150-15	tk 90151-15	tk 90193-15
160 mm - 6¼ "	tk 90150-16	tk 90151-16	tk 90193-16
180 mm - 7 "	tk 90150-18	tk 90151-18	tk 90193-18
200 mm - 8 "	tk 90150-20	tk 90151-20	tk 90193-20
220 mm - 8¾ "	tk 90150-22	tk 90151-22	tk 90193-22
240 mm - 9½ "	tk 90150-24	tk 90151-24	tk 90193-24
			
150 mm - 6 "	tk 90152-15	tk 90153-15	tk 90194-15
180 mm - 7 "	tk 90152-18	tk 90153-18	tk 90194-18
200 mm - 8 "	tk 90152-20	tk 90153-20	tk 90194-20
220 mm - 8¾ "	tk 90152-22	tk 90153-22	tk 90194-22
240 mm - 9½ "	tk 90152-24	tk 90153-24	tk 90194-24


pointed, angled

blunt, angled


blunt, angled

Bipolar forceps




M C P H E R S O N		
	0.25 mm	0.45 mm
		
70 mm - 2¾ "	tk 90060-07	tk 90062-07
	<i>pointed</i>	<i>blunt</i>



M C P H E R S O N		
	0.25 mm	0.45 mm
		
70 mm - 2¾ "	tk 90061-07	tk 90063-07
	<i>pointed, angled</i>	<i>blunt, angled</i>



	0.3 mm	1.0 mm
		
170 mm - 6¾ "	tk 90776-17	tk 90777-17
	<i>pointed, knee angled</i>	<i>blunt, knee angled</i>



Bipolar cables

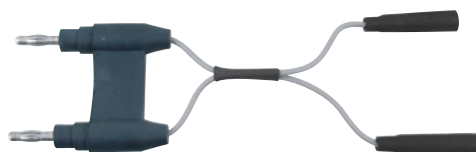
High frequency cable, bipolar

autoclavable
134°C / 273°F

	Erbe ICC/ACC, Wisap, Storz	3 m	tk 707-330	Flat plug round	
			tk 707-300	Flat plug square	
			tk 707-310	2-Pin plug	
	Martin, Berchtold	3 m	tk 707-331	Flat plug round	
			tk 707-301	Flat plug square	
			tk 707-311	2-Pin plug	
	TEKNO, Valleylab USA	3 m	tk 707-332	Flat plug round	
			tk 707-302	Flat plug square	
			tk 707-312	2-Pin plug	
	TEKNO, Valleylab Europe	3 m	tk 707-333	Flat plug round	
			tk 707-303	Flat plug square	
			tk 707-309	2-Pin plug	
	TEKNO, 19 mm for TOM 212/212A/ 412/412A only	3 m	tk 707-338	Flat plug round	

Unit side

Instrument side



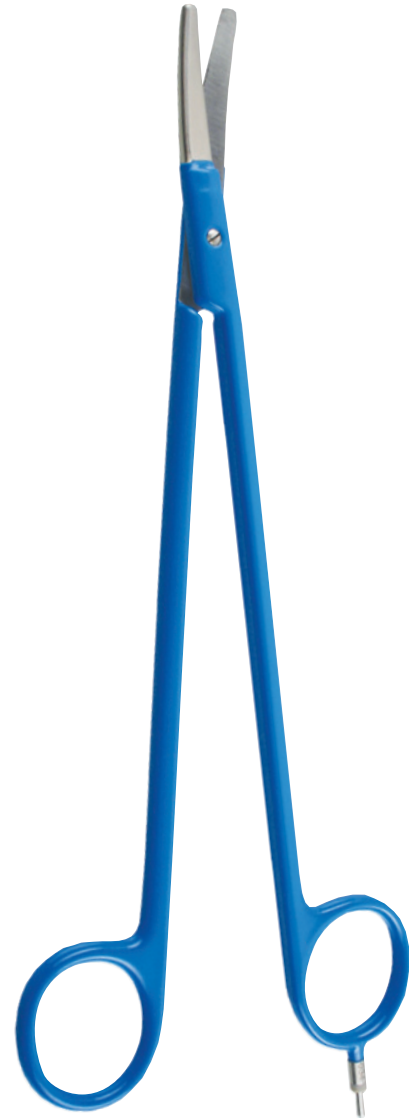
tk 90302-30

Flexible, silicone adapter for fixed bipolar cable,
(Valleylab, EMC, Conmed)

Bipolar scissors

Our bipolar scissors enable simultaneously cutting, dissection and coagulation with the safety of bipolar current. Compatible with "pinpoint" and "micro precise" coagulation.

Easy maintenance, and easy repair: the scissors can be taken apart for resharpening.



180 mm - 7"	tk 90701-18	tk 90702-18
210 mm - 8¼"	tk 90701-21	tk 90702-21
230 mm - 8¾"	tk 90701-23	tk 90702-23
280 mm - 11"	tk 90701-28	tk 90702-28

curved

curved, slim blades

autoclavable
134°C / 273°F



Erbe ICC/ACC, Wisap, Storz	3 m	tk 90721-03
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Martin, Berchtold, Aesculap	3 m	tk 90722-03
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TEKNO, Valleylab USA	3 m	tk 90720-03
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TEKNO, Valleylab Europe	3 m	tk 90723-03
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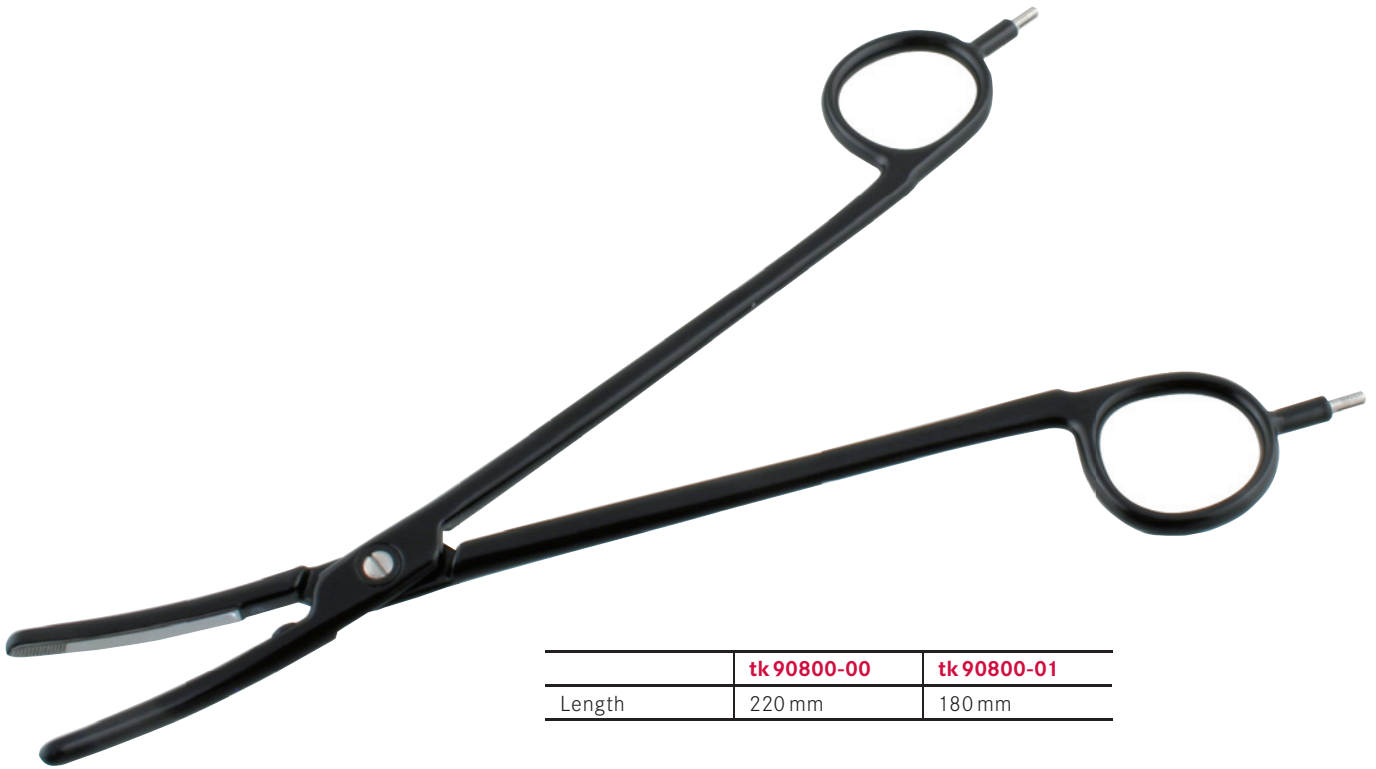


Unit side

Instrument side







Bipolar artery sealer



	tk 90800-00	tk 90800-01
Length	220 mm	180 mm

autoclavable
134°C / 273°F

	Erbe ICC/ACC, Wisap, Storz	5 m	tk 90800-13
	Martin, Berchtold	5 m	tk 90800-12
	TEKNO, Valleylab USA	5 m	tk 90800-11
	TEKNO, Valleylab Europe	5 m	tk 90800-10



BIPOLAR RESECTOSCOPE

The TEKNO system for bipolar resection (patent pending) impresses by its outstanding cutting quality and maximum safety.

The special insulations of the bipolar system guarantee unique safety for patient and user.

The TEKNO system possesses not only a bipolar resectoscope, but also an HF unit, especially adjusted for the instrument with specific performance parameters for bipolar resection. In spite of this specification, the unit can also be used in all other surgical fields without any restrictions.

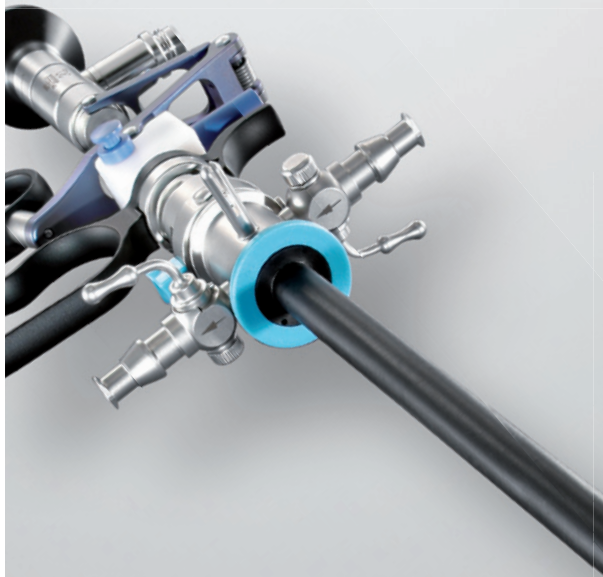
The user can choose among a huge variety of new designed electrodes, which meet the highest safety demands

General advantages of the bipolar TEKNO system against monopolar resection:

- Less conductive trauma, as the flow of the current between active and neutral electrode is strictly limited to the target area.*
- Lower risk of capsular lesion.*
- Less thermal damage to neighbouring tissues.*
- No need for neutral electrodes and thus eliminating all risks related to their use and positioning.*
- The low voltages bear only low risks of damaging the instrument or the scope.*
- Due to their lower voltages, the bipolar currents do not interfere with pacemakers or other instruments used during the intervention.*

Advantages of the bipolar TEKNO system against competitor's products:

- No risk of injuring the Urethra, due to the complete insulation of the sheath and other components of the system.*
- The high efficiency of the TEKNO system guarantees extremely fine cuts and a precise coagulation.*
- Better visual orientation than with competitor's products, as the neutral electrode is placed outside the field of vision.*
- Effective removal of cut off tissues as the neutral electrode is situated outside the working area.*
- The TEKNO system offers the widest range of different electrodes.*
- The TEKNO system HF unit can be used for all surgical purposes in spite of its specific performance features for bipolar resection.*



For further informations, please ask for our special catalogue!

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Monopolar and bipolar adapters

USE OF OUTPUTS AND AVAILABLE ADAPTERS

ARGON

FOOT SWITCHES
(at the back)

(90016-00)

(90017-00)

BIPOLAR PEDAL ONLY

FOR MONOPOLAR OR BIPOLAR ACTIVATION
according to PED key selection

MONOPOLAR

BIPOLAR

PED

HAND-CONTROLLED HANDLES

A
HAND-CONTROLLED

B
HAND-CONTROLLED

NEUTRAL PLATE

BIPOLAR OUTPUT(S)

(adapters on request)

90302-30

(U.S.A. international standard)

(Valleylab, EMC, Dolley, Conmed..)

90302-31

(Erbe T/ACC/ICC, Storz..)

90302-32

(Martin, Berchtold..)

FOOT-CONTROLLED
i.e. for resectoscopes

B FOOT-CONTROLLED
(FOR SPECIFIC STORED PROGRAMS ONLY)

NEUTRAL PLATE:
See Users' Manual
for warning instructions
(adapters on request)

90302-41

(U.S.A. standard)

90302-40

(Valleylab, Conmed..)

FOOT-ACTIVATED PENCILS OR INSTRUMENTS
(90302-21 adapter is available on request)

90302-21

2-7 mm
8 mm
12.5 mm
4 mm

90302-40

10 mm
2.5 mm

ARGON

90301-10

90301-18

BIPOLAR PEDAL ONLY

B HAND-CONTR.

GAS FILTER

Filter 90302-24 +
Connector 90302-25
For units provided with
Argon section

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