

Feel the power



**Bipolar
Arthroscopy electrodes**
Safe handling, maximum efficiency

Bipolar HF electrodes "FirePen"

Safe handling, maximum efficiency -
all-in-one HF electrode for single use

Developed for use in modern arthroscopic operating theatres, the **bipolar HF electrodes "FirePen"** stand for uncompromising performance combined with safe handling.

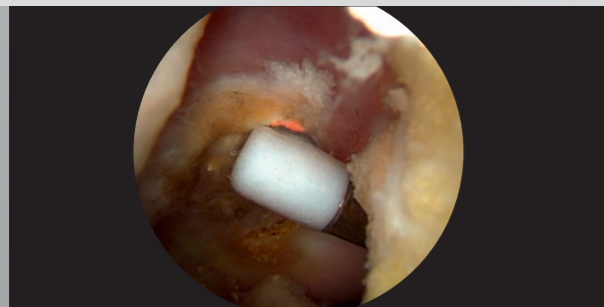
② Complete handpiece for single use

A wide range of options according to the requirements of arthroscopy:

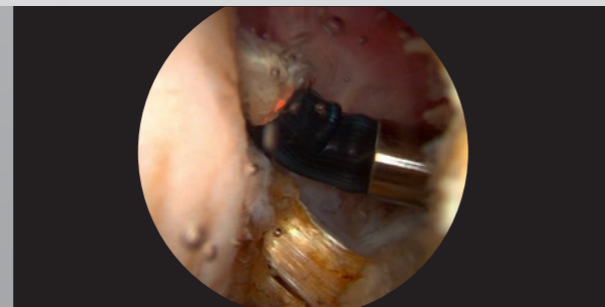
- Geometries developed with foresight - blocking of the electrode is a thing of the past
- Innovative flexible electrode tips for use in anatomically demanding compartments
- No additional suction pump is required thanks to the integrated suction tube, which fits the FLUID CONTROL Arthro
- Easy change from cutting to coagulation profile using the two ergonomically positioned buttons in the handpiece

The FirePen electrodes enable a safe and smooth surgical procedure:

- Pre-sterilised packaged complete instrument
- Simple serving by non-sterile staff
- Plug & play to avoid interruptions during intraoperative electrode changes



Shoulder joint applications: acromioplasty, partial synovectomy, cartilage smoothing & tenotomy



Application area hip joint: synovectomy, cartilage smoothing, labrum & partial resection

Complete arthroscopy electrode for single use		with suction	without suction	Article no.
②			●	893-24s
②			●	893-25s
②		●		893-37s
②		●		893-38s
②		●		893-39s
②		●		893-41s
②			●	893-42s

Bipolar HF electrodes "BiVac system"

Safe handling, maximum efficiency - reusable handpiece with separate HF electrode for single use

The **BiVac electrodes**, designed as a modular system, are used for cutting, vaporising, coagulating and thermally modifying soft tissue in a 0.9% NaCl solution.

Arthroscopy electrode insert for single use		with suction	without suction	Article no.
	Vaporisation electrode 90° - L = 150 mm	•		890-1s
	Vaporisation electrode 70° - L = 150 mm		•	890-2s
	Hook, fine 0.8 x 2 mm - L = 150 mm		•	890-3s
	Hook, reinforced 0.9 x 3 mm - L = 150 mm		•	890-4s
	Vaporisation electrode 45° - L = 150 mm, double bent	•		890-5s
	Vaporisation electrode 45° - L = 150 mm	•		890-6s
	Vaporisation electrode 45° - L = 150 mm, bendable	•		890-7s
	Vaporisation electrode 90° - L = 150 mm		•	891-1s
	Vaporisation electrode 45° - L = 180 mm, double bent	•		891-2s

Reusable handpiece

Designed as a modular system, the BiVac electrode offers a number of economic advantages:

- Three ergonomically adapted handpieces (handle with switch, standard handpiece and filigree handpiece) with different plugs
- Can be sterilised up to three hundred times
- Various electrode tips for single use
- Simple connectivity via click lock between tip and handpiece

Handpiece with BiVac electrode - the adaptable solution

Adaptable to the existing systems in your operating theatres:

- Four versions of the handpiece with integrated plug for direct connection to: Erbe, KLS Martin and International 2-pin sockets
- Four adapters for standard 6-pin handpiece for connection to Arthrocare, Mitek and International 2-pin sockets



Knee joint application area: partial meniscus resection, plica synovialis resection, partial synovectomy & lateral release



Application area hip joint: synovectomy, cartilage smoothing, labrum & partial resection



Shoulder joint application area: acromioplasty, partial synovectomy, cartilage smoothing & tenotomy

FLUID CONTROL Arthro

Irrigation and suction pump for arthroscopy

FLUID CONTROL Arthro is a pump system for arthroscopic endoscopy. Its particular strength lies in a practice-orientated combination of high performance and an economical overall concept. The FLUID CONTROL Arthro is predestined for diagnostic and therapeutic procedures.



Power reserves for all situations

Thanks to the high pressure and delivery capacity, the system offers sufficient power reserves for all eventualities. The **wash mode**, which can be activated by foot switch, quickly restores optimum visibility, especially if the rinsing liquid becomes cloudy due to the use of HF electrodes.

- Automatic regulation of flow and pressure
- Delivery rate: up to 2 l/min

Particularly user-friendly

Pre-defined pre-sets for e.g. knee, shoulder or hip, as well as freely programmable indication profiles, mean that application parameters do not always have to be reentered.



Tube Set with connector

- Recommended when using the BIVAC electrode
- Consistent intra-articular temperature with activated suction
- Can be connected to the FLUID CONTROL Arthro 2204-System

Bestellinformationen

Starter set for arthroscopy

Arthro-Spine suction irrigation pump 200 mmHg 2204001
Irrigation tube set with piercing mandrel, L 3 m 4171223
Mains cable 2440.03

Foot switch 2204901

Hose section & connection for use on the
BIVAC electrode, 350 mm 888-0

HF generator and radio fan

The energy source for arthroscopy

High-end HF generator

The **ARTro** is equipped with the latest technology and software. The generator was specially developed for arthroscopy.

- **High-tech bipolar mode** for working in brine solution with up to 250 W
- **Control of the multi-stage power** output via foot switch or by pressing a button on the handpiece
- **Control of parameters / performance** with activated electrode for rapid adaptation to any new intra-operative situation

Radioblator RF 4 MHz

■ Pioneering technologies

The patented automatic control of the RF current according to the impedance of the tissue enables the surgeon to achieve a consistent quality of the desired tissue effects. This applies to all monopolar and bipolar modes.

■ Security

With an operating frequency of 4 MHz, safe coagulation and ablation of the tissue is achieved and neighbouring tissue areas are heated less. This minimises the occurrence of thermally induced



Order information

Electrosurgical Unit ARTro

for the use of monopolar and bipolar
HF electrodes 100-610

Multiswitch, two-pedal footswitch

with fixed connection cable 100-303

Tissue necrosis and irritation of nearby nerves are significantly minimised.

■ Expert in many specialised fields

The Radioblator RF 4 MHz generator can be used for a wide range of electrosurgical tasks in the operating theatre thanks to the implementation of a variety of working modes. The possibility of programming userspecific parameters facilitates use in different areas.

Ordering information

Radioblator RF 4 KPL consists of:

2330001 RADIOBLATOR RF 4
2330901 foot switch 2 pedals
2330045 CONNECTION CABLE MONO NL 3M
2440.03 POWER CABLE 23300011

Order information

for bipolar arthroscopy electrodes

HF adapter for integrating the bipolar HF electrodes with FirePen system into your existing system

Bipolar HF adapter

Arthrocare, on Artro 200 6-pin,
Compatible with Arthrocare Quantum **92390**

Bipolar HF adapter




Mitek VAPR 2/3, on Artro 200 **92392**

Bipolar HF adapter

Mitek VAPR, on Artro 200 6-pin **92389**

Bipolar HF adapter

HF-GENERATOR 2260,
Arthro 200 to international 2-pin **92398**

Handpiece for the bipolar HF electrodes for the BiVac system with matching connector plug		Article no.
	Bipolar HF handle with buttons for HF generator ARTro (see above for adapter), cable length 4 m	92889-6
	Bipolar HF cable with handpiece for HF generator ARTro, cable length 4 m	92888-6
	Bipolar HF cable with handpiece for Erbe, cable length 4 m	92888-7
	Bipolar HF cable with handpiece for KLS Martin, cable length 4 m	92888-8
	Bipolar HF cable with handpiece for RW Radioblator 4 MHz, (international 2-pin), cable length 4 m	92888-9
	Bipolar HF cable filigree with handpiece for HF generator ARTro, cable length 4 m	92888-16
	Bipolar HF cable filigree with handpiece for Erbe, cable length 4 m	92888-17
	Bipolar HF cable filigree with handpiece for KLS Martin, cable length 4 m	92888-18
	Bipolar HF cable filigree with handpiece for RW Radioblator 4 MHz (international 2-pin), cable length 4 m	92888-19

Subject to change without notice. We would like to point out that not every product is available in all countries. Please always take note of the information accompanying the product. For detailed information, please get in touch with your contact person or contact Richard Wolf GmbH directly.