

## FLUID CONTROL Arthro 2204

Suction and irrigation pump for arthroscopy  
with automatic tube recognition



### FLUID CONTROL Arthro

is a new pump system for arthroscopy and fully endoscopic spinal surgery. The particular strength of this system lies in a practical combination of high performance and a cost-effective overall concept. The new software and technical enhancements make the **FLUID CONTROL Arthro** ideal for diagnostic and therapeutic arthroscopies.

**FLUID CONTROL Arthro** has already been prepared for integration in core, the digital OR from Richard Wolf.

## FLUID CONTROL Arthro 2204

Suction and irrigation pump for arthroscopy  
with automatic tube recognition



**Arthro/spine suc./irrig.pump bndl**  
for arthroscopy ..... **22040011**

- Comprising:
- 1 x arthro/spine suc./irrig.pump 200mmHG ..... 2204001
  - 1 x irrigation tube set spike ..... 8171223
  - 1 x tube set for vacuum, incl. filter ..... 2206207
  - 1 x protection filter for gas filtration ..... 4171.121
  - 1 x power cable ..... 2440.03

**Arthro/spine suc./irrig.pump bndl**  
with Spine Mode software module for arthroscopy and  
fully endoscopic spinal surgery ..... **22040012**

- Comprising:
- 1 x arthro/spine suc./irrig.pump 200mmHG ..... 2204001
  - 1 x Spine mode software module .....2204101
  - 1 x irrigation tube set spike ..... 8171223
  - 1 x tube set for vacuum, incl. filter ..... 2206207
  - 1 x protection filter for gas filtration ..... 4171.121
  - 1 x power cable ..... 2440.03

Recommended accessories		Product no.
Footswitch		2204901

# FLUID CONTROL Arthro 2204

## Irrigation and suction pump for arthroscopy with automatic tube recognition

### Day-patient tube set

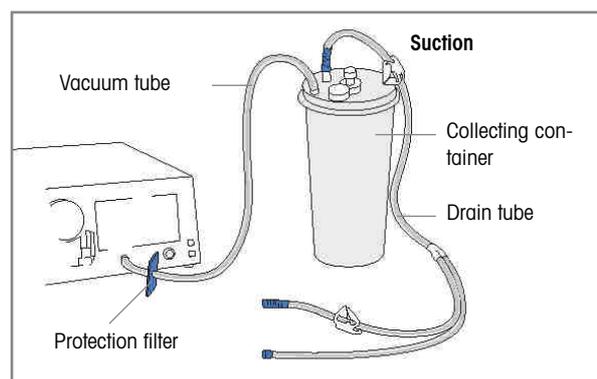
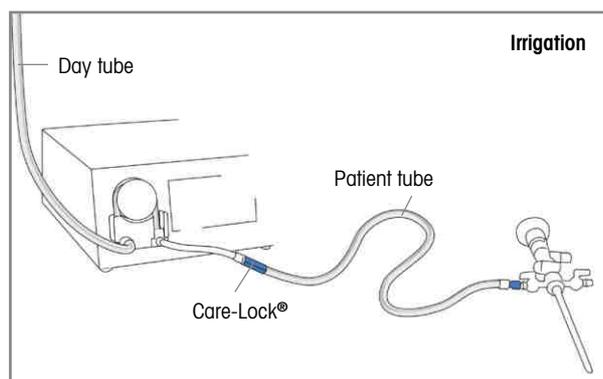
#### From two interventions/patients per day:

Use the **day-patient tube set**, which comprises a day tube and a connected patient tube. The day tube remains in the pump throughout the day, while the patient tube has to be changed for each operation. The irrigation fluid bag can remain on the pump until it has been comple-

tely used up. **This significantly reduces the amount of waste and cuts costs.**

**Further tube versions are available to complement the system.**

**Note:** The use of the day-patient tube set has not been approved for the Spine Mode application.



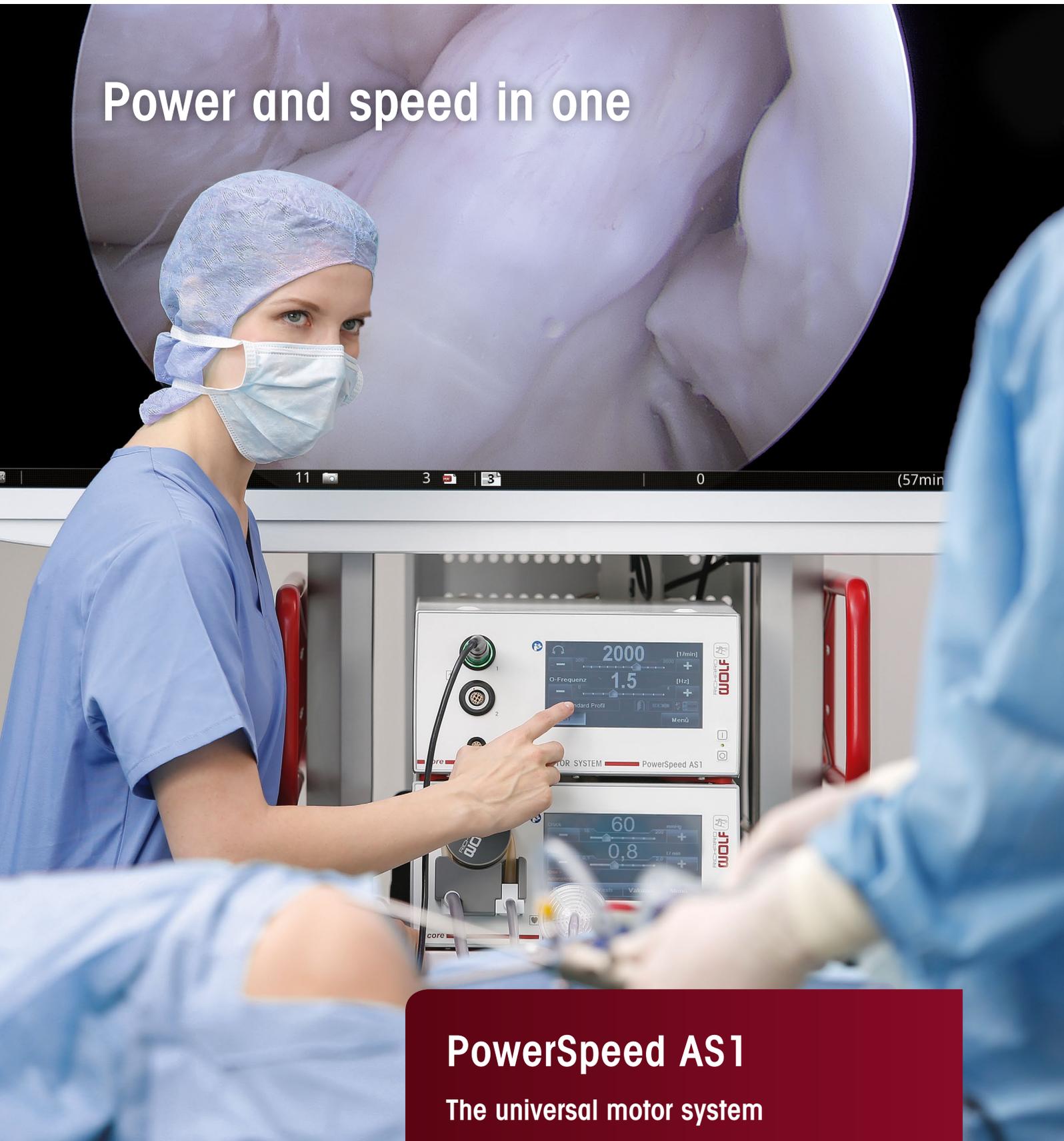
Irrigation			Product no.
Accessories – reusable	Irrigation tube set spike	With Luer-Lock connection, autoclavable, incl. 10 spare membranes, reusable for 20 reprocessing cycles	8171223
	Irrigation tube set with spike L 3 m	(PACK= 10 PCS), with Luer-Lock connection, sterile, disposable product	4171223
Accessories – disposable	Irrigation tube set CARE-LOCK, L 3 m	(PACK= 10 PCS), sterile, disposable product	4171224
	Day irrigation tube set	(PACK= 10 PCS), with piercing spike, sterile disposable product, PVC	4171226
	Patient irrigation tube set L 3m	(PACK= 10 PCS), with Luer-Lock connection, sterile, disposable product, PVC	4171227

**Note:** Day tube and patient tube can only be used together. A new patient tube is required for each patient – the day tube can be used for up to 20 patients.

Suction			Product no.
Accessories – reusable	Tube set for vacuum, incl. filter	with integrated hygiene filter, PACK= 10 PCS, service life of 30 days (connected to irrigation pump)	2206207
Accessories – disposable	Secretion container, 2 L	2 liters, no lid	8170.6551
	Secretion container, 2.5 L	2.5 liters (PACK= 2 PCS)	41706566
	Tube set for suction (with 2 ports)	sterile, disposable, (PACK= 10 PCS) for connecting instruments to collecting container	T0503-01

VII/21 || Subject to modifications. Please note that some products may not be available in all countries. For more detailed information, please consult with your contact partner or directly with Richard Wolf GmbH.

Power and speed in one



## PowerSpeed AS1

The universal motor system

# PowerSpeed AS1

Universal motor system

The PowerSpeed AS1 motor system has been developed for universal use and provides extremely comfortable and ergonomic handling. Quick and powerful resecting, drilling, burring, or sawing – anything is possible.

It's exactly the right tool for the job.

- Wide range of disposable and reusable Shaver Blades and burrs
- Intelligent tool detection via RFID chip
- Touchscreen makes user interface easy to operate
- Communication interface with FLUID CONTROL ArthroPump 2204 and **core** nova
- Universal use of all current Richard Wolf motor handpieces
- New instrument design
- Wireless footswitch
- Universal use in spinal surgery, bronchoscopy, and arthroscopy




**Order data**

	<p><b>Power Stick M5/3</b> Motor handpiece for driving rotation tools, with three function keys</p> <p>with fixed connection cable, 3.0 m ..... 8995500031 with removable connection cable, 3.0 m ..... 89955.0003</p>
	<p><b>Power Stick M5/0</b> Motor handpiece for driving rotation tools,</p> <p>with fixed connection cable, 3.0 m ..... 8995500001 with removable connection cable, 3.0 m ..... 89955.0000</p>
	<p><b>Micro Stick S1</b> Motor handpiece for driving rotation tools, with one function key</p> <p>with fixed connection cable, 3.0 m ..... 89951.0001</p>
	<p><b>PowerSpeed AS1 generator 2305</b> Universal motor system for orthopedics and spinal surgery, for connecting motor handpieces when working with shaver and high-speed applications, and for connecting the Power Drill M1. Includes power supply cable, CAN bus connection cable, and packaging. Power supply connection 50/60 Hz 100–240 V ..... 2305001</p>
	<p><b>Wireless footswitch</b> ..... 2305100</p> <p>For this:</p> <p>Plug-in power supply for wireless footswitch ..... FW8002M/8 Backup cable for wireless footswitch ..... 2305300</p>

# The high-speed route to success

Shaver system with large tool interface

## For orthopedics



### For reuse

#### Tools for Power Stick M5/0 or M5/3, large interface

Tool	WL	2 mm Ø	2.5 mm Ø	3 mm Ø	3.5 mm Ø	4.5 mm Ø	5.5 mm Ø	6 mm Ø	6.5 mm Ø
 Resector, smooth	130 mm				899750003	899750004	899750005		
 Resector, serrated	45 mm	89975.0032							
	80 mm		899750132						
	130 mm				89975.0033	89975.0034	89975.0035		
	200 mm					899732004*			
 Resector, aggressive	80 mm		899750332						
	130 mm				89975.0333	89975.0334	899750335		
200 mm					899732334*				
 Resector, oval	130 mm				89975.0113	89975.0114	89975.0115		
 Resector, curved, convex, smooth	130 mm				89975.0253	89975.0254			
 Resector, curved, concave, smooth	130 mm				89975.0263	89975.0264			
 Resector, curved, aggressive, convex	200 mm					899732254			
 Resector, curved, aggressive, concave	200 mm					899732264			
 End cutter	130 mm				89975.0493	89975.0494			
 Round burr, hooded	80 mm			89975.0503					
	130 mm					89975.0504	89975.0505		
	200 mm						899732504		
 Round burr, unhooded	130 mm							89975.0516	
 Burr, oval, acromionizer	130 mm				89975.0553	899750554	89975.0555		899750556
	200 mm						899732555		

\* with distal guide hole for guide wire Ø 2 mm

**Power Stick M5/3**



- Handpieces with / without control panel
- Up to 16,000 rpm
- For tools with a diameter of 2.5 – 6.5 mm
- Oscillation frequency of up to 4 Hz

**Disposable** (5 pieces/pack)

**Tools for Power Stick M5/0 or M5/3, large interface**

Tool	WL	2.5 mm Ø	3.5 mm Ø	4.5 mm Ø	5.5 mm Ø	6 mm Ø	6.5 mm Ø
 Resector, universal	160 mm			499732344			
 Resector, smooth	130 mm		49975.0003	49975.0004	49975.0005		
 Resector, serrated	130 mm		49975.0033	49975.0034	49975.0035		
 Resector, aggressive	80 mm	499750332					
 Resector, aggressive	130 mm		49975.0333	49975.0334	49975.0335		
 Resector, oval	130 mm		49975.0113	49975.0114	49975.0115		
 Resector, universal, curved	160 mm			499732274			
 Resector, curved, convex	130 mm		49975.0253	49975.0254			
 Resector, curved, concave	130 mm		49975.0263	49975.0264			
 End cutter	130 mm			49975.0494			
 Round burr, hooded	130 mm			49975.0504			
 Round burr, unhooded	130 mm					49975.0516	
 Burr, oval, acromionizer	130 mm		49975.0553	499750554	49975.0555		499750556
	160 mm				499732565		

# Precision for small structures

Shaver system with small tool interface

For orthopedics



## For reuse

### Tools for Micro Stick S1, small interface

Tool	WL	2 mm Ø	2.5 mm Ø	3 mm Ø	3.5 mm Ø	4.5 mm Ø
Resector, serrated	45 mm	89971.0032				
	80 mm		899710132			
	130 mm				89971.0033	89971.0034
Resector, aggressive	80 mm		899710332			
Resector, oval	130 mm				89971.0113	89971.0114
Resector, curved, convex	130 mm					89971.0254
Resector, curved, concave	130 mm					89971.0264
Round burr, hooded	80 mm			89971.0503		

**Micro Stick S1**

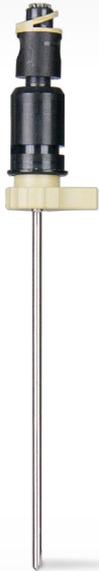


- Mini motor handpiece for exceptional precision in small joints
- Up to 3,000 rpm
  - Practical range of accessories
- For shaver tools with a diameter of 2 – 3.5 mm

**Disposable** (5 pieces/pack)

**Tools for Micro Stick S1, small interface**

Tool	WL	2 mm Ø	2.5 mm Ø	3 mm Ø	3.5 mm Ø
 Resector, serrated	45 mm	49971.0032			
	130 mm				49971.0033
 Resector, aggressive	80 mm		499710332		
 Resector, oval	130 mm				49971.0113
 Round burr, hooded	80 mm			49971.0503	
 Burr, oval, acromionizer	130 mm				49971.0553



# Endobronchial Shaver Blades

For gentle and safe tissue resection and secretion removal

For bronchoscopy



The Shaver Blades are provided as disposable, non-sterile items. They are ideal for use with the TEXAS bronchoscope



## Large, aggressive blade

with double serrated cutting window, straight

This straight, large-lumen, aggressive blade is ideal for recanalization of the bronchial system.



## Secretion remover

This remover is a complete world first. The effect produced by the connected suction system and the spiral makes it possible for it to suction and remove blood clots or viscous secretions. The remover is entirely atraumatic and gentle on tissue.



## Bipolar suction device

This bipolar suction device makes it possible to stop bleeding during suction itself and suck up secretions in targeted areas.

# Precision for bronchial structures

Shaver system with small tool interface  
for endobronchial resection and secretion removal

Micro Stick S1



## For reuse

### Endobronchial tools (tracheal resectors, secretion remover) for Micro Stick S1, small interface

Tool	WL	4.5 mm Ø	5.5 mm Ø
 Resector curved smooth*	460 mm	825610446	
 Resector curved, aggressive*		825620446	
 Resector aggressive			825630546
 Secretion remover			825640546

\* distally curved upward by 15°

### HF accessories for endobronchial resection

	<b>Bipolar suction device</b> Straight, working length 460 mm, Ø 5.2 mm ..... 844202110
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### Optically fully integrated rigid bronchoscope

	<b>Telescope element</b> Endoscope with fiber image guide, TEXAS model, DOV 12°, with integrated lens irrigation and protective sheath..... 82510.1400
	<b>Tracheoscope tube size 8</b> for telescope element 82510.1400, inner diameter with telescope element ID = 8 mm, OD = 12 mm, WL = 295.5 mm ..... 825210830
	<b>Tracheoscope tube size 10</b> for telescope element 82510.1400, inner diameter with telescope element ID = 10 mm, OD = 14 mm, WL = 300 mm ..... 825211030

# PowerSpeed AS1

The advantages at a glance

## Wireless footswitch

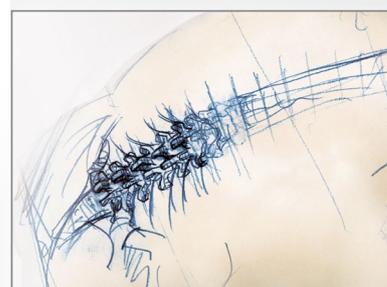
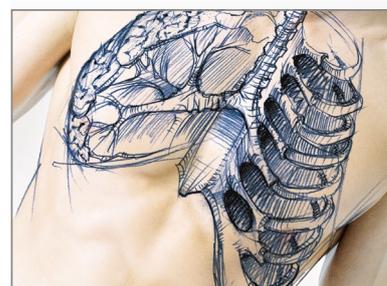
The equipment's innovations also include the specially developed Bluetooth wireless footswitch, which provides a wireless connection to the PowerSpeed AS1 control device.

Alternatively, the new footswitch can be wired using the backup cable that is available as an option.

Using this type of connection charges the internal battery at the same time.

## Universal use

in orthopedics, bronchoscopy, and spinal surgery



## Integrated operating theater system core nova

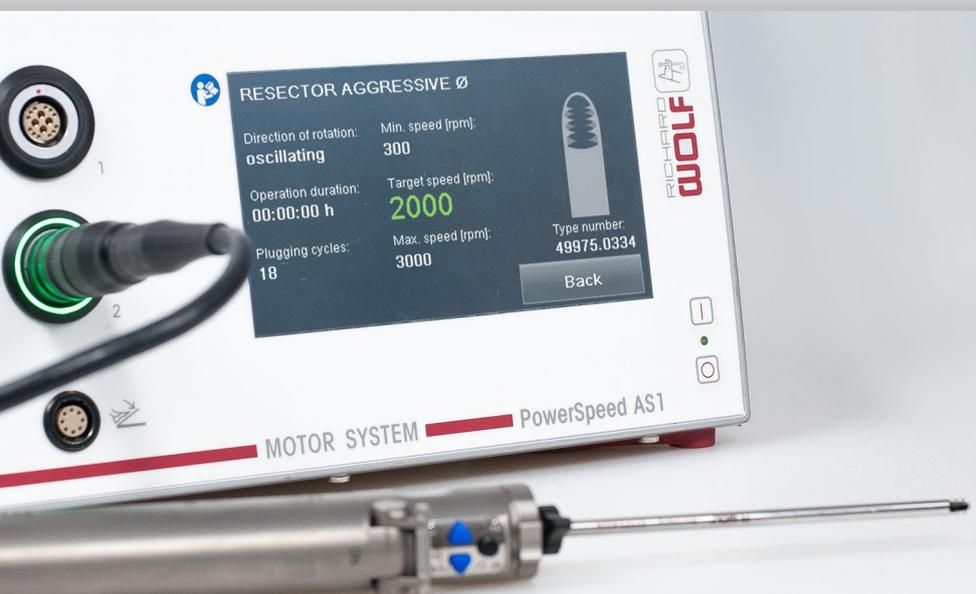
The PowerSpeed AS1 is able to communicate with a range of external devices, allowing the user to take advantage of its full range of functions.

Connecting the PowerSpeed AS1 to core nova makes it possible to control the shaver console via the integrated system and display information from the various menus in the core nova browser.

### Communication interface with FLUID CONTROL arthroscopy

Connecting the FLUID CONTROL Arthro/Spine 2204 to the PowerSpeed AS1 makes it possible to activate the pump's wash mode using the Blue-tooth wireless footswitch for the shaver.

Shaver mode, a new function, can also be activated – increasing the pressure and flow in the joint while the motor handpiece is being used.



### Intelligent tool detection via RFID chip

When a motor handpiece is inserted, it is detected and the tool detection feature starts.

After a short time, the detected tool is displayed as a graphic on the screen for 10 seconds and the parameters and previous usage data can be read from it.

# Katalogo Psi. 15



## Precision with Bite



The resectoscopes from Richard Wolf

**Katalogo Psl. 16**



## Bipolar electrodes

12°/30°, for multiple use, bipolar

	Designation	Loop	for sheath sizes [in Fr.]				Color code		Type
			<b>DS</b> 22/24	<b>iS</b> 24	<b>DS</b> 24/26	<b>iS</b> 26	Fork	Stem	
	Cutting electrode	Loop ø 0.3 mm	✓	–	–	–	blue	yellow	<b>8622133</b>
			–	✓	✓	✓	blue	yellow	8622131
	Coagulation electrode	Cylinder ø 1.2 mm	✓	✓	✓	✓	blue	yellow	<b>8623022</b>
	Hook electrode	Hook	✓	✓	✓	✓	blue	yellow	862309

✓ suitable for the relevant sheath size    – not suitable

**DS** = Continuous irrigation

**iS** = intermittent irrigation

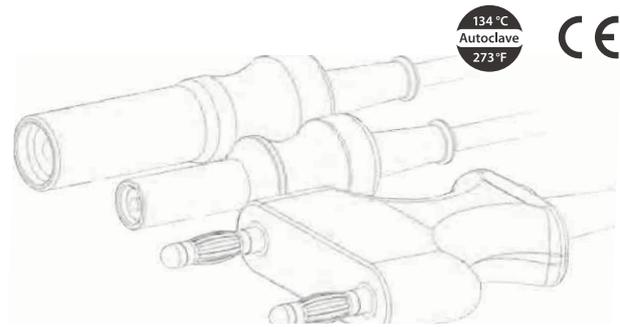
# HF-Kabel bipolar mit Flachstecker

HF-cable bipolar flat-plug

www.reger-med.de

Langlebig, hoch flexibel und hochwertig  
Durable, highly flexible and high quality

- Verbesserter Korrosionsschutz durch versilberte Litzen  
Improved corrosion protection through silver-plated strands



## Instrumentenseite / Instrument connecting



<b>Beschreibung</b> description	Bipolares Flachsteckerkabel für den Anschluss der bipolaren HF-Pinzetten Bipolar flat-plug-cable for the connection of the bipolar HF-forceps		
<b>VPE   unit</b>	1	<b>Umax</b>	800 Vp

## Geräteseite / Unit connecting

<b>Artikel-Nr.   item code</b>	<b>92019</b>	<b>92020</b>
<b>Maße   dimensions</b>	3 m	5 m
<b>Beschreibung   description</b>	Valleylab	
<b>Artikel-Nr.   item code</b>	<b>92015</b>	<b>92016</b>
<b>Maße   dimensions</b>	3 m	5 m
<b>Beschreibung   description</b>	Erbe VIO/ICC/ACC	
<b>Artikel-Nr.   item code</b>	<b>92017</b>	<b>92018</b>
<b>Maße   dimensions</b>	3 m	5 m
<b>Beschreibung   description</b>	Martin; Berchtold; Integra	
<b>Artikel-Nr.   item code</b>	<b>92013</b>	<b>92014</b>
<b>Maße   dimensions</b>	3 m	5 m
<b>Beschreibung   description</b>	Ellman	
<b>Artikel-Nr.   item code</b>	<b>92021</b> ⚠	<b>92022</b> ⚠
<b>Maße   dimensions</b>	3 m	5 m
<b>Beschreibung   description</b>	US-Modelle 2 Pol	



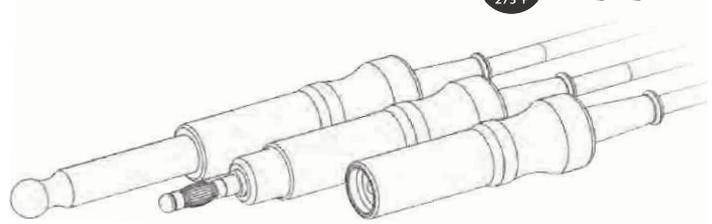
Nicht konform mit der internationalen Norm IEC 60601-2-2:2010-01.  
Nur an bipolaren Ausgang von Hochfrequenzgeneratoren anschließen  
Not conform with the international Norm IEC 60601-2-2:2010-01.  
Connect to bipolar output on high-frequency generators only.

# HF-Kabel monopolar

HF-cable monopolar

Langlebig, hoch flexibel und hochwertig  
Durable, highly flexible and high quality

- Verbesserter Korrosionsschutz durch versilberte Litzen  
Improved corrosion protection through silver-plated strands



## Instrumentenseite / Instrument connecting



<b>Beschreibung</b>   description	4 mm HF-Anschluss für alle gängigen monopolaren HF-Instrumente 4 mm HF-connection for all common monopolar HF-instruments		
<b>VPE</b>   unit	1	<b>Umax</b>	4,3 kVp

## Geräteseite / Unit connecting

<b>Artikel-Nr.</b>   item code	<b>92002</b>	<b>92003</b>
<b>Maße</b>   dimensions	3 m	5 m
<b>Beschreibung</b>   description	Erbe VIO/ICC/ACC	
<b>Artikel-Nr.</b>   item code	<b>92175</b>	
<b>Maße</b>   dimensions	5 m	
<b>Beschreibung</b>   description	Berchtold; Integra	
<b>Artikel-Nr.</b>   item code	<b>92004</b>	<b>92005</b>
<b>Maße</b>   dimensions	3 m	5 m
<b>Beschreibung</b>   description	Berchtold; Integra; Erbe T-Model	
<b>Artikel-Nr.</b>   item code	<b>92051</b>	<b>92105</b>
<b>Maße</b>   dimensions	3 m	5 m
<b>Beschreibung</b>   description	Valleylab	
<b>Artikel-Nr.</b>   item code	<b>92203</b>	
<b>Maße</b>   dimensions	3 m	
<b>Beschreibung</b>   description	Ellman	



# Bipolare Pinzetten Standard

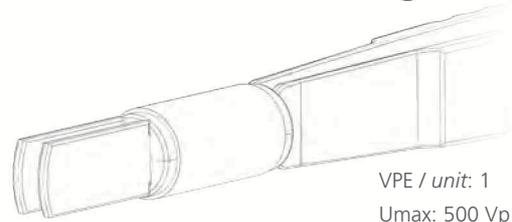
*Bipolar forceps standard*

www.reger-med.de

· Für HF- und RF-Generatoren geeignet  
*Applicable for HF- and RF-generators*

· Hochwertige Isolation  
*Valuable insulation*

· Europäischer Flachstecker / Führungsstift  
*European flat plug / guiding pin*



VPE / unit: 1  
Umax: 500 Vp

Spitzenlänge / *Tip length* = L2



Gesamtlänge / *Total length* = L1

Spitzenbreite   <i>tip width</i>	Nadel / <i>Needle</i>	0.5 mm	1.0 mm	2.0 mm	2.0 mm Karo
<b>Artikel-Nr.   <i>item code</i></b>	<b>95011</b>	<b>95170</b>	<b>95039</b>	<b>95027</b>	-
<b>L1</b>	165 mm	165 mm	165 mm	165 mm	-
<b>L2</b>	6 mm	8 mm	8 mm	8 mm	-
<b>Artikel-Nr.   <i>item code</i></b>	<b>95181</b>	<b>95171</b>	<b>95180</b>	<b>95178</b>	-
<b>L1</b>	180 mm	180 mm	180 mm	180 mm	-
<b>L2</b>	6 mm	8 mm	8 mm	8 mm	-
<b>Artikel-Nr.   <i>item code</i></b>	<b>95112</b>	<b>95037</b>	<b>95040</b>	<b>95029</b>	<b>95057</b>
<b>L1</b>	195 mm	195 mm	195 mm	195 mm	195 mm
<b>L2</b>	8 mm	8 mm	8 mm	8 mm	8 mm
<b>Artikel-Nr.   <i>item code</i></b>	<b>95113</b>	<b>95172</b>	<b>95041</b>	<b>95030</b>	-
<b>L1</b>	225 mm	225 mm	225 mm	225 mm	-
<b>L2</b>	8 mm	8 mm	8 mm	8 mm	-

# Elektro-Koagulations- & Schneid-Handstücke

## Electro Coagulation & Cutting Handpieces



### HF-Handstück mit Fingerschalter mit 3-Pin Stecker

HF-Handpiece with Fingerswitch and 3-Pin plug

Kabellänge  
Cable length

Best-Nr.  
Order No.

Kabellänge Cable length	Best-Nr. Order No.
	4 mm
	2,4 mm
3 m	53-046
5 m	53-045



- Mit 4mm und 2,4 mm Aufnahmen & Innen 6-kant
- Bis zu 300 mal autoklavierbar
- Vorbereitet zum Anschluss von Rauchabsauggeräten

- With Ø 4mm and 2,4 mm & inner hexagon
- Up to 300 times autoclavable
- Prepared for connection of smoke evacuators



### HF-Handstück mit Fingerschalter mit 3-Pin Stecker

HF-Handpiece with Fingerswitch and 3-Pin plug

Kabellänge  
Cable length

Best-Nr.  
Order No.

Kabellänge Cable length	Best-Nr. Order No.
	4 mm
	2,4 mm
3 m	53-072
	53-070



- Mit 4 mm und 2,4 mm Aufnahmen & Innen 6-kant
- Inklusive Messerelektrode
- Bis zu 100 autoklavierbar
- Vorbereitet zum Anschluss von Rauchabsauggeräten

- With Ø 4 mm and 2,4 mm & inner hexagon
- Including knife electrode
- Up to 100 times autoclavable
- Prepared for connection of smoke evacuators