

BIOTRONIK // Product Catalog // Electrophysiology

# BIOTRONIK Product Catalog

Electrophysiology



# General Information

# Company Profile



## Saving Lives. Providing Safety.

BIOTRONIK is one of the world's leading manufacturers of cardio- and endovascular technology, head-quartered in Berlin, Germany. We focus on manufacturing devices for cardiac rhythm management, vascular intervention, and electrophysiology. Our products help physicians save lives and improve quality of life.

## Global Player

We operate a global network of more than 5,600 employees who research, develop, manufacture, and sell BIOTRONIK products. We support our customers on every continent, in more than 100 countries worldwide.

## Our Motto: "excellence for life"

Company founder Prof. Dr. Max Schaldach developed the first German pacemaker in 1963. Since then, BIOTRONIK has focused on high-quality patient care and developing innovative solutions. We believe in surpassing the average to achieve excellence in everything we do. Close collaboration with expert physicians and researchers characterizes our corporate mindset. Our approach accelerates the development of an idea into a widely available, high-quality, lifesaving product

# Company Profile

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## Business Focus

Over the past five decades, BIOTRONIK has specialized in three business areas – cardiac rhythm management, vascular intervention, and electrophysiology – enabling the company to provide customers with a wide range of superior quality solutions for increasing therapy efficacy, streamlining clinical workflow, and improving quality of life.

## Cardiac Rhythm Management

BIOTRONIK Cardiac Rhythm Management offers diagnostic tools and options for treating arrhythmias. Modern implants not only save lives but also fulfil a broad range of functions, improving a patient's quality of life by monitoring the heart. Some of the most noteworthy innovations in this field include BIOTRONIK Home Monitoring®, the only FDA- and CE-approved remote monitoring system for the early detection of clinically relevant events, and ProMRI® technology, allowing implant patients to undergo crucial MRI scans.

In the field of cardiac rhythm management, we offer the following products:

- Pacemakers
- Defibrillators
- Leads and catheters
- External devices for processing implant data
- Wireless remote patient monitoring
- Implantable loop recorder

## Vascular Intervention

BIOTRONIK is one of the leading companies developing and manufacturing minimally invasive treatments for vascular diseases of the heart and peripheral arterial system. The company's product portfolio includes stent systems and balloon catheters with and without drug elution, plus guide wires and accessories for vascular intervention. One recent, notable invention is Orsiro, the industry's first hybrid drug-eluting stent for treating coronary artery stenosis.

In the field of vascular intervention, we offer the following products:

- Guide wires
- Balloon catheters
- Stents
- Diagnostic catheters
- Accessory products

## Electrophysiology

BIOTRONIK electrophysiology pioneered and validated an innovative ablation concept: GoldTip ablation catheters have become the 'highest standard' of therapy for physicians worldwide, their quality proven in multiple studies and daily clinical practice. GoldTip catheters offer an optimal blend of function, control, and safety. They maintain a cooler tip temperature, facilitate fast and efficient lesion formation, reduce coagulation, and reduce catheter exchange rates during procedures

In the field of electrophysiology, we offer the following products:

- Ablation catheters
- Diagnostic catheters
- External devices for stimulation and irrigation flow
- Accessories for trans-septal access
- Catheters for temporary pacing

# European Heart with an International Pulse

## Representing Quality, Worldwide

BIOTRONIK has a European heart and a strong international pulse. Our corporate headquarters in Berlin and our Vascular Intervention (VI) headquarters in Bülach, Switzerland are responsible for different areas of innovation but maintain the same focus on quality, which is what really makes BIOTRONIK stand out. We produce all critical components in-house and manufacture them exclusively in high-tech countries – in Germany, Switzerland, and the United States.

## Headquarters

### **BIOTRONIK SE & Co. KG**

#### **Corporate Headquarters: Berlin, Germany**

Cardiac rhythm management, electrophysiology, R & D, production, quality assurance, regulatory affairs, general management, human resources, global marketing, finance, international sales.

BIOTRONIK SE & Co. KG  
Woermannkehre 1  
12359 Berlin · Germany  
Tel +49 (0) 30 68905-0  
Fax +49 (0) 30 6852804  
sales@biotronik.com  
www.biotronik.com

### **BIOTRONIK AG**

#### **VI Headquarters: Bülach, Switzerland**

Products for minimally invasive coronary and peripheral intervention, R & D, production, quality control, regulatory affairs, marketing, sales, business management.

BIOTRONIK AG  
Ackerstrasse 6  
8180 Bülach · Switzerland  
Tel +41 (0) 44 8645111  
Fax +41 (0) 44 8645005  
info.vi@biotronik.com  
www.biotronik.com

# European Heart with an International Pulse

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## Competence Centers

### Germany

#### **CORTRONIK GmbH, Rostock-Warnemünde Center for Vascular Implants**

Manufacturing and developing, stent technologies, materials, laser, microprocessing

#### **Technology and Service Center, Erlangen**

Development of innovative product concepts, and design/conduction of clinical trials

#### **VascoMed GmbH, Binzen**

Manufacturing and developing Electrophysiology Catheters

### USA

#### **BIOTRONIK, Inc., Lake Oswego (Oregon) North America Headquarters**

Sales, marketing, training & education, regulatory and clinical research

# Our History

## 1960s – Exploring Opportunities

Physicist Max Schaldach and electrical engineer Otto Franke founded BIOTRONIK in 1963, developing the first German implantable pacemaker in Berlin. At first, the company focused primarily on overcoming basic technological hurdles, such as short battery service time and the uncertainty of remaining battery power, and on developing a reliable method for connecting the lead to both pacemaker and heart. In the following years, the Research and Development (R&D) division produced a series of innovations that would come to be seen as milestones in cardiovascular medical technology.

## 1970s – Expanding the Playing Field

The appointment of Dr. Schaldach as professor of biomedical engineering at Erlangen's Friedrich-Alexander University boosted R&D work at BIOTRONIK. In 1976, we opened our first headquarters in Berlin-Neukölln, eventually settling at Woermannkehre 1, which we still call home today.

Upon acquiring Stimulation Technology, Inc., we set up production facilities in Lake Oswego, Oregon, USA, and also began developing and producing advanced hybrid circuitry and modules for the biomedical industry. These advancements were a precursor to breakthrough technology in the cardiac health industry and still stand as pioneering achievements in the history of medical technology.

## 1980s – New Horizons

The development of physiological stimulation marked the beginning of a new phase in pacemaker therapy. Dual-chamber pacing technology was developed to better respond to the actual needs of the patient. These "DDD" pacemakers gave priority to spontaneous heart contractions, triggering a stimulus only when necessary. BIOTRONIK became a European market leader with the release of the Diplos 03 pacemaker. Thanks to other technological and commercial successes in the 1980s, we were able to expand from Germany further into Europe, South America, and Asia.

# History

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## 1990s – Widening the Product Range

In 1993, BIOTRONIK expanded its product range with implantable defibrillators. Our philosophy of designing products to imitate the natural workings of the body led us to another key achievement: Closed Loop Stimulation. This technology integrated the pacemaker into the body's natural regulatory system, thus allowing it to react to the patient's changing physical and related mental activity in the most physiological way possible. Another innovation, the fractal coating of implantable leads, was also based on natural functions. This coating optimizes the lead's electrically active surface, critically improving its electrical sensing and pacing properties. BIOTRONIK is still the forerunner in this field, and the only manufacturer of fractal coated leads.

In 1995, we added vascular intervention devices to our product range, such as balloon catheters and stents for the treatment of coronary and peripheral vessels. We later began vascular intervention production in Switzerland, which still remains one of our high-tech production centers today. Diagnostic and therapeutic catheters as well as radio-frequency generators for ablation furthered the work started in the 1970s, rounding out a comprehensive product portfolio for cardiac electrotherapy.

## 2000s – Meeting the Challenges of the New Millennium

The first implantation of a pacemaker with BIOTRONIK Home Monitoring® signaled our leap into the 21st century with a service that provided physicians with current data from implants, regardless of their patients' location. This innovative technology combined optimal therapy with the most efficient care, increasing and protecting the patient's security. The ability to follow-up on patients at home after implantation not only enabled physicians to monitor patients under less stressful conditions, but also allowed for early detection of clinically relevant events. Backed up by several successful and wide-ranging studies, BIOTRONIK Home Monitoring® was and is the first and only system of its kind to receive both CE and FDA approval for early detection of clinically relevant events and reduction of in-office follow-ups. It has also spurred our enhanced entry into the realm of heart failure therapy, supporting the release of the first CRT implants with telemonitoring technology.

## 2010 and Beyond – Continuing to Produce Life-Saving Solutions

ProMRI® became a crucial part of our technology portfolio, giving patients access to life-saving MRI scans that were previously unavailable to them. We now boast the broadest market portfolio of devices approved for MRI, including complete pacemaker and ICD series, implants for heart failure therapy, and leads. We are the world's only company offering ICDs and CRT devices that are safe for MR scans.

In 2011, we added Orsiro, the industry's first hybrid drug-eluting stent, to our vascular intervention portfolio. A leap forward in the treatment of coronary artery stenosis, Orsiro features a PROBIO coating that encapsulates the stent's surface along with a bioabsorbable BIOLute coating that delivers a limus drug. Positive results from early clinical studies saw Orsiro performing as best in class.

In 2012, we added a completely new product category to our portfolio with the development of BioMonitor, a small implantable heart monitor using BIOTRONIK Home Monitoring® for highly accurate arrhythmia detection. In addition, we affirmed our commitment to the Asia-Pacific region with the opening of a new office in Singapore.

We also turned our efforts to philanthropic work through a charitable partnership with the Heartbeat International Foundation (HBI), providing life-saving implantable devices to some of the world's neediest patients in developing parts of the world. In only the first two years of cooperation, 1,000 lives were already saved.

BIOTRONIK has always focused its efforts on improving patient safety and quality of life. In the years to come, we will continue to fulfil our motto, "excellence for life."

# Quality & Innovation



## The Foundation of “excellence for life”

For 50 years, BIOTRONIK has been committed to broadening the frontiers of what is possible in disease therapies. We focus on innovations that truly make a unique and valuable difference while also guaranteeing the high quality of each and every device we bring to the market.

We have pioneered some of the most important solutions for increasing therapy efficacy, streamlining clinical workflow and improving quality of life. Many of our unique technologies remain unmatched in the industry.

## Unsurpassed Pioneering Solutions from BIOTRONIK

**BIOTRONIK Home Monitoring®**  
Simplicity of care. Anytime, anywhere.  
First and only wireless remote patient monitoring system with FDA and CE approval for early detection and remote follow-up.

**DX Atrial Sensing**  
Unique protection.  
The world's first and only single-chamber defibrillator capable of detecting episodes of atrial fibrillation using just a single lead.

**DREAMS**  
The future of vascular stenting.  
Unique bioabsorbable magnesium scaffold opens vessels and keeps them from re-clogging while avoiding the long-term disadvantages of permanent metal stents.

**PROBIO**  
Making metal biologically invisible.  
Proprietary silicon carbide passive coating clinically proven to enhance the biocompatibility of permanent stents.

**ProMRI®**  
More access. More options.  
The industry's broadest portfolio of cardiac devices and leads that allow patients access to MR scans.

**Closed Loop Stimulation**  
Unique physiological therapy.  
The only system in the world that uses neurological information to optimize the heartbeat during physical as well as mental activity.

**Fractal Coating**  
More efficient, more effective energy.  
Unique technology that significantly increases the bioeffective surface area by factor 1,000, for low chronic thresholds and better sensing.

**Gold-tip Ablation**  
Truly worth its weight in gold.  
Gold-tip technology clinically proven to allow for superior cooling and deeper ablation lesion creation.

## BIOTRONIK Awards and Prestigious Nominations

Visionary thinking does not go unrecognized in an industry where creativity and customer-focused R&D result not just in financial gain and international renown, but also in human lives saved. Our pioneering efforts have thus led to several award-winning solutions.



Frost & Sullivan Remote Monitoring Customer Service Leadership Award 2010  
**Winner for BIOTRONIK Home Monitoring®**



Cardiostim Innovation Award 2010  
**Winner for BIOTRONIK Home Monitoring®**



German Innovation Award 2009  
**Top 3 finalist for BIOTRONIK Home Monitoring®**



Wolfgang Trautwein Award of the German Cardiac Society in 2009  
**Winner in collaboration with the University Clinic of Würzburg for research in the MRI field**



EuroPCR – Novelty Award 2007  
**Winner for absorbable metal stent (AMS) program**



Actualidad Economica: Las mejores ideas del año 2006  
**Winner for LUMAX DR-T**



Frost & Sullivan Product Differentiation Innovation Award 2007  
**Winner for Talos Pacemaker System**



Frost & Sullivan Product Innovation of the Year 2006  
**Winner for Closed Loop Stimulation**



FDA Technology Hall of Fame  
**BIOTRONIK Home Monitoring® was awarded a place in 2001**

# Global Presence



## BIOTRONIK Products are Available in the Following Countries

### EUROPE

Albania  
Andorra  
Austria  
Belgium  
Bosnia-Herzegovina  
Bulgaria  
Croatia  
Cyprus  
Czech Republic  
Denmark  
Estonia  
Finland  
France  
Germany  
Greece  
Hungary  
Iceland  
Ireland  
Italy  
Kosovo  
Latvia  
Lithuania  
Luxemburg  
Macedonia  
Malta  
Montenegro

Monaco  
Netherlands  
Norway  
Poland  
Portugal  
Romania  
Serbia  
Slovakia  
Slovenia  
Spain  
Sweden  
Switzerland  
Turkey  
United Kingdom

### NORTH AMERICA

USA  
Canada

### LATIN AMERICA

Argentina  
Bolivia  
Brazil  
Chile  
Columbia  
Costa Rica  
Cuba

Dominican Republic  
Ecuador  
El Salvador  
Guatemala  
Guyana  
Honduras  
Jamaica  
Martinique  
Mexico  
Nicaragua  
Panama  
Paraguay  
Peru  
Puerto Rico  
Surinam  
Uruguay  
Venezuela

### AFRICA

Algeria  
Benin  
Burkina-Faso  
Egypt  
Kenya  
Mauritania  
Morocco  
Senegal

South Africa  
Sudan  
Tunisia

**CIS** (Commonwealth of Independent States)  
Azerbaijan  
Belarus  
Georgia  
Kazakhstan  
Moldova  
Russia  
Ukraine  
Uzbekistan

### MIDDLE EAST

Bahrain  
Iran  
Iraq  
Israel  
Jordan  
Kuwait  
Lebanon  
Libya  
Oman  
Palestine  
Qatar

Saudi Arabia  
Syria  
United Arab Emirates  
Yemen

### ASIA/PACIFIC

Australia  
Bangladesh  
China  
Hong Kong  
India  
Indonesia  
Japan  
Malaysia  
Maldives  
New Zealand  
Pakistan  
Philippines  
Singapore  
South Korea  
Sri Lanka  
Taiwan  
Thailand  
Macao  
Vietnam



# Conversion Tables



## Conversion Table and Ablation Catheter Tip Legend

French (F)	mm
1.0	0.33
2.4	0.80
2.6	0.87
2.9	0.90
3.0	1.00
3.3	1.10
3.4	1.13
3.7	1.23
4.0	1.33
4.5	1.50
5.0	1.66
6.0	2.00
7.0	2.33
8.0	2.66
9.0	3.00
10.0	3.33
11.5	3.83
15.5	5.17
18.0	6.00
22.0	7.33

 4mm non irrigated

 8mm non irrigated

 6-hole irrigated

 12-hole irrigated

# Conversion Tables

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# Ablation Catheters



# AlCath Flux G eXtra

Advanced irrigated GoldTip ablation catheter



## Product Highlights

- **GoldTip Ablation - Irrigated**  
Allows reduction of irrigation (for HF patients)<sup>1</sup>
- **eXtra Design**  
12 irrigation holes on 3 levels arranged in 3D level design for optimal & uniform cooling
- **FullCircle Deflection**  
Anatomically optimized curve geometry for flexibility in the full clinical spectrum

<sup>1</sup> Szili-Török et al., Hearth Rhythm Society 2012, P005-109.

## Ordering Information

Model	Tip	Curve	Spacing	French	Length	Order number
AlCath Flux Red G eXtra	3.5 mm irrigated	Red	2-5-2 mm	7F	110 cm	376379
AlCath Flux Blue G eXtra	3.5 mm irrigated	Blue	2-5-2 mm	7F	110 cm	376388
AlCath Flux Green G eXtra	3.5 mm irrigated	Green	2-5-2 mm	7F	110 cm	376384
AlCath Flux Black G eXtra	3.5 mm irrigated	Black	2-5-2 mm	7F	110 cm	376390
AlCath Flux Cyan G eXtra	3.5 mm irrigated	Cyan	2-5-2 mm	7F	110 cm	376386

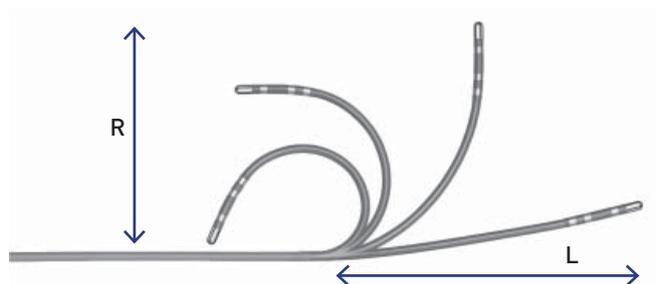
# AlCath Flux G eXtra

## Technical Data

Catheter specification	
Tip electrode size	3.5 mm
Tip electrode type	Irrigated
Tip temperature sensor	Thermocouple
Ring electrode size	1.55 mm
Number of electrodes	4
Electrode spacing	2-5-2 mm
Electrode material	Gold (Au)
Shaft diameter	7F (2.3 mm)
Braiding	High density
Curve type	Red, Blue, Green, Black, Cyan
Curve shape	Steerable – FullCircle
Reach at 90° deflection	48mm, 57mm, 65mm, 73mm, 80mm
Length of the deflectable area	65mm, 75mm, 85mm, 95mm, 105mm
Effective catheter length	110 cm
Connection plug	9-pole, REDEL Luer-lock (female)
Patient cable	PK-109, 111, 112, 142, 143, 185

Patient cable	Ablation system	Order number
PK-109	Stockert EP-Shuttle	330 079
PK-111	Osyka HAT 300 Smart	330 080
PK-112	Medtronic Atakr, Radionics RFG 3-E	330 081
PK-142	IBI 1500	362 442
PK-143	Boston Scientific Maestro 3000	371 597
PK-185	BIOTRONIK AbControl MDS	345 954

Curve chart	Length L	Reach R
Red	65 mm	48 mm
Blue	75 mm	57 mm
Green	85 mm	65 mm
Black	95 mm	73 mm
Cyan	105 mm	80 mm



# ALCath Flux eXtra

Advanced irrigated tip ablation catheter



## Product Highlights

- **eXtra Design**  
12 irrigation holes on 3 levels arranged in 3D level design for optimal & uniform cooling
- **Full Circle Deflection**  
Anatomically optimized curve geometry for flexibility in the full clinical spectrum
- **SmoothMove Steering**  
Precise transfer of micromotion for maximum control

## Ordering Information

Model	Tip	Curve	Spacing	French	Length	Order number
ALCath Flux Red eXtra	3.5 mm irrigated	Red	2-5-2 mm	7F	110 cm	376383
ALCath Flux Blue eXtra	3.5 mm irrigated	Blue	2-5-2 mm	7F	110 cm	376389
ALCath Flux Green eXtra	3.5 mm irrigated	Green	2-5-2 mm	7F	110 cm	376385
ALCath Flux Black eXtra	3.5 mm irrigated	Black	2-5-2 mm	7F	110 cm	376391
ALCath Flux Cyan eXtra	3.5 mm irrigated	Cyan	2-5-2 mm	7F	110 cm	376387

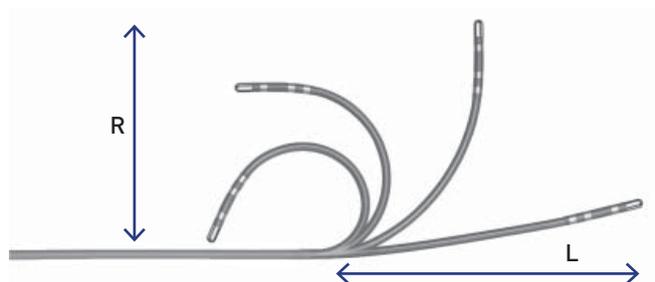
# AlCath Flux eXtra

## Technical Data

Catheter specification	
Tip electrode size	3.5 mm
Tip electrode type	Irrigated
Tip temperature sensor	Thermocouple
Ring electrode size	1.55 mm
Number of electrodes	4
Electrode spacing	2-5-2 mm
Electrode material	Platin Iridium (Pt/Ir)
Shaft diameter	7F (2.3 mm)
Braiding	High density
Curve type	Red, Blue, Green, Black, Cyan
Curve shape	Steerable – FullCircle
Reach at 90° deflection	48mm, 57mm, 65mm, 73mm, 80mm
Length of the deflectable area	65mm, 75mm, 85mm, 95mm, 105mm
Effective catheter length	110 cm
Connection plug	9-pole, REDEL Luer-lock (female)
Patient cable	PK-109, 111, 112, 142, 143, 185

Patient cable	Ablation system	Order number
PK-109	Stockert EP-Shuttle	330 079
PK-111	Osypka HAT 300 Smart	330 080
PK-112	Medtronic Atakr, Radionics RFG 3-E	330 081
PK-142	IBI 1500	362 442
PK-143	Boston Scientific Maestro 3000	371 597
PK-185	BIOTRONIK AbControl MDS	345 954

Curve chart	Length L	Reach R
Red	65 mm	48 mm
Blue	75 mm	57 mm
Green	85 mm	65 mm
Black	95 mm	73 mm
Cyan	105 mm	80 mm



# ALCath Flutter Flux G eXtra

3.5 mm GoldTip ablation catheter



## Product Highlights

- **Refined Control**  
Superior high-density braiding for direct 1:1 motion transfer
- **Reinforced Stability**  
Lateral stabilization of the tip segment for effective tip-to-tissue contact
- **Reduced Length**  
Catheter length optimized for the right atrium for enhanced high-precision steering

## Ordering Information

Model	Tip	Curve	Spacing	French	Length	Order number
ALCath Flutter Flux Black G eXtra	3.5 mm	Black	2-5-2 mm	7F	95 cm	380783

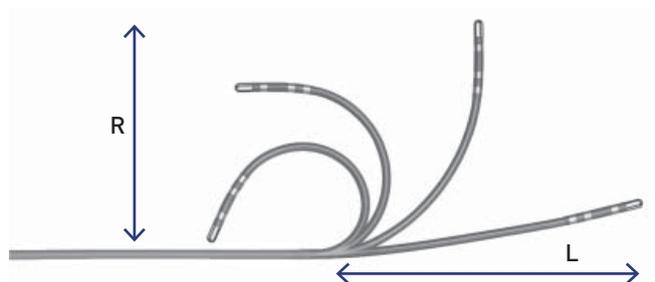
# AlCath Flutter Flux G eXtra

## Technical Data

Catheter specification	
Tip electrode size	3.5 mm
Tip electrode type	Irrigated
Tip temperature sensor	Thermocouple
Ring electrode size	1.55 mm
Number of electrodes	4
Electrode spacing	2-5-2 mm
Electrode material	Gold (Au)
Shaft diameter	7F (2.3 mm)
Braiding	High density
Curve type	Black
Curve shape	Steerable – FullCircle
Reach at 90° deflection	73 mm
Length of the deflectable area	95 mm
Effective catheter length	95 cm
Connection plug	9-pole, REDEL Luer-lock (female)
Patient cable	PK-109, 111, 112, 142, 143, 185

Patient cable	Ablation system	Order number
PK-109	Stockert EP-Shuttle	330 079
PK-111	Osypka HAT 300 Smart	330 080
PK-112	Medtronic Atakr, Radionics RFG 3-E	330 081
PK-142	IBI 1500	362 442
PK-143	Boston Scientific Maestro 3000	371 597
PK-185	BIOTRONIK AbControl MDS	345 954

Curve chart	Length L	Reach R
Black	95 mm	73 mm



# ALCath Flutter LT G

8mm GoldTip ablation catheter



## Product Highlights

- **Refined Control**  
Superior high-density braiding for direct 1:1 motion transfer
- **Reinforced Stability**  
Lateral stabilization of the tip segment for effective tip-to-tissue contact
- **Reduced Length**  
Catheter length optimized for the right atrium for enhanced high-precision steering

## Ordering Information

Model	Tip	Curve	Spacing	French	Length	Order number
ALCath Flutter Black LT G	8 mm	Black	2-5-2 mm	7F	95 cm	368997

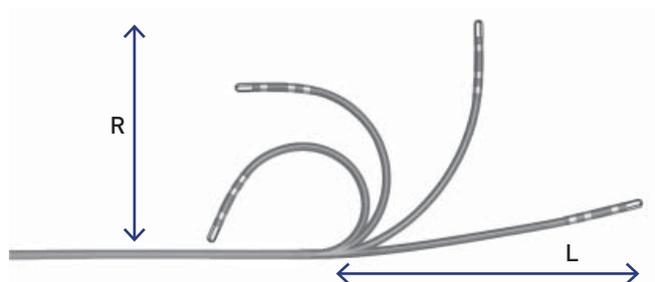
# AlCath Flutter LT G

## Technical Data

Catheter specification	
Tip electrode size	8 mm
Tip electrode type	Non-irrigated
Tip temperature sensor	Thermocouple
Ring electrode size	1.55 mm
Number of electrodes	4
Electrode spacing	2-5-2 mm
Electrode material	Gold (Au)
Shaft diameter	7F (2.3 mm)
Braiding	High density
Curve type	Black
Curve shape	Steerable – FullCircle
Reach at 90° deflection	73 mm
Length of the deflectable area	95 mm
Effective catheter length	95 cm
Connection plug	9-pole, REDEL
Patient cable	PK-109, 111, 112, 142, 143, 185

Patient cable	Ablation system	Order number
PK-109	Stockert EP-Shuttle	330 079
PK-111	Osyka HAT 300 Smart	330 080
PK-112	Medtronic Atakr, Radionics RFG 3-E	330 081
PK-142	IBI 1500	362 442
PK-143	Boston Scientific Maestro 3000	371 597
PK-185	BIOTRONIK AbControl MDS	345 954

Curve chart	Length L	Reach R
Black	95 mm	73 mm



# ALCath LT G FullCircle

8mm GoldTip ablation catheter



## Product Highlights

- **GoldTip Ablation**  
5.3% higher ablation success rate<sup>1</sup>
- **FullCircle Deflection**  
Complete deflection to reach most challenging anatomical positions
- **SmoothMove Steering**  
Precise transfer of micromotion for maximum control

<sup>1</sup> T. Lewalter et al., Europace [2011] 13 (1): 102–108.

## Ordering Information

Model	Tip	Curve	Spacing	French	Length	Order number
ALCath Red TC LT G FullCircle	8 mm	Red	2-5-2 mm	7F	110 cm	364 539
ALCath Blue TC LT G FullCircle	8 mm	Blue	2-5-2 mm	7F	110 cm	364 527
ALCath Green TC LT G FullCircle	8 mm	Green	2-5-2 mm	7F	110 cm	364 535
ALCath Black TC LT G FullCircle	8 mm	Black	2-5-2 mm	7F	110 cm	364 524
ALCath Cyan TC LT G FullCircle	8 mm	Cyan	2-5-2 mm	7F	110 cm	364 531

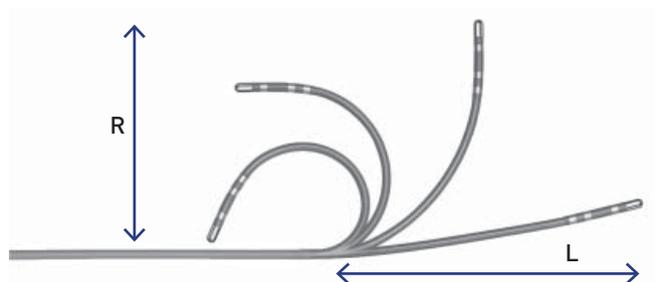
# AlCath LT G FullCircle

## Technical Data

Catheter specification	
Tip electrode size	8 mm
Tip electrode type	Non-irrigated
Tip temperature sensor	Thermocouple
Ring electrode size	1.55 mm
Number of electrodes	4
Electrode spacing	2-5-2 mm
Electrode material	Gold (Au)
Shaft diameter	7F (2.3 mm)
Braiding	Yes
Curve type	Red, Blue, Green, Black, Cyan
Curve shape	Steerable – FullCircle
Reach at 90° deflection	48mm, 57mm, 65mm, 73mm, 80mm
Length of the deflectable area	65mm, 75mm, 85mm, 95mm 105mm
Effective catheter length	110 cm
Connection plug	9-pole, REDEL
Patient cable	PK-109, 111, 112, 142, 143, 185

Patient cable	Ablation system	Order number
PK-109	Stockert EP-Shuttle	330 079
PK-111	Osypka HAT 300 Smart	330 080
PK-112	Medtronic Atakr, Radionics RFG 3-E	330 081
PK-142	IBI 1500	362 442
PK-143	Boston Scientific Maestro 3000	371 597
PK-185	BIOTRONIK AbControl MDS	345 954

Curve chart	Length L	Reach R
Red	65 mm	48 mm
Blue	75 mm	57 mm
Green	85 mm	65 mm
Black	95 mm	73 mm
Cyan	105 mm	80 mm



# ALCath LT FullCircle

8mm tip ablation catheter



## Product Highlights

- **FullCircle Deflection**  
Complete deflection to reach most challenging anatomical positions
- **SmoothMove Steering**  
Precise transfer of micromotion for maximum control
- **Quality and Functionality**  
Outstanding manufacturing and intuitive handling for best performance

## Ordering Information

Model	Tip	Curve	Spacing	French	Length	Order number
ALCath Red TC LT FullCircle	8 mm	Red	2-5-2 mm	7F	110 cm	364 538
ALCath Blue TC LT FullCircle	8 mm	Blue	2-5-2 mm	7F	110 cm	364 526
ALCath Green TC LT FullCircle	8 mm	Green	2-5-2 mm	7F	110 cm	364 534
ALCath Black TC LT FullCircle	8 mm	Black	2-5-2 mm	7F	110 cm	364 523
ALCath Cyan TC LT FullCircle	8 mm	Cyan	2-5-2 mm	7F	110 cm	364 530

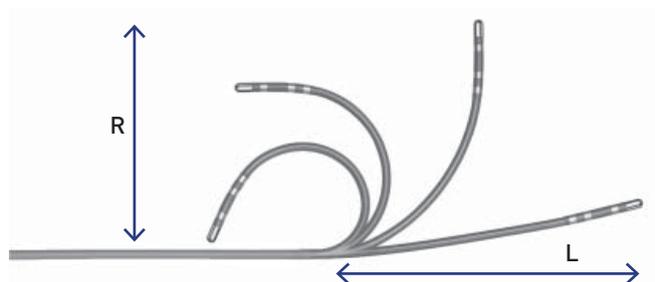
# AlCath LT FullCircle

## Technical Data

Catheter specification	
Tip electrode size	8 mm
Tip electrode type	Non-irrigated
Tip temperature sensor	Thermocouple
Ring electrode size	1.55 mm
Number of electrodes	4
Electrode spacing	2-5-2 mm
Electrode material	Platin Iridium (Pt/Ir)
Shaft diameter	7F (2.3 mm)
Braiding	Yes
Curve type	Red, Blue, Green, Black, Cyan
Curve shape	Steerable - FullCircle
Reach at 90° deflection	48mm, 57mm, 65mm, 73mm, 80mm
Length of the deflectable area	65mm, 75mm, 85mm, 95mm, 105mm
Effective catheter length	110 cm
Connection plug	9-pole, REDEL
Patient cable	PK-109, 111, 112, 142, 143, 185

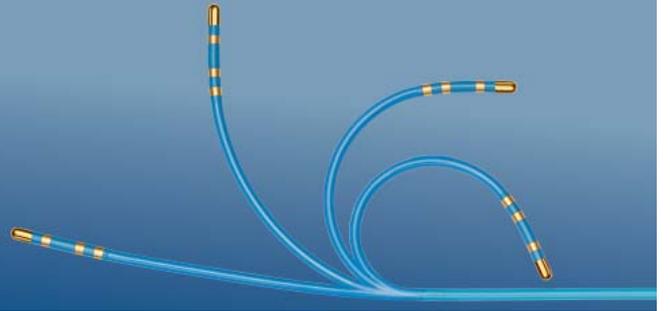
Patient cable	Ablation system	Order number
PK-109	Stockert EP-Shuttle	330 079
PK-111	Osypka HAT 300 Smart	330 080
PK-112	Medtronic Atakr, Radionics RFG 3-E	330 081
PK-142	IBI 1500	362 442
PK-143	Boston Scientific Maestro 3000	371 597
PK-185	BIOTRONIK AbControl MDS	345 954

Curve chart	Length L	Reach R
Red	65 mm	48 mm
Blue	75 mm	57 mm
Green	85 mm	65 mm
Black	95 mm	73 mm
Cyan	105 mm	80 mm



# ALCath G FullCircle

4mm GoldTip ablation catheter



## Product Highlights

- **GoldTip Ablation**  
33% faster lesions<sup>1</sup> and eightfold less char formation<sup>2</sup>
- **FullCircle Deflection**  
Complete deflection to reach most challenging anatomical positions
- **SmoothMove Steering**  
Precise transfer of micromotion for maximum control

1 T. Balazs et al., J Interv Card Electrophysiol. 2012 Oct 26.

2 M. Stühlinger et al., J Cardiovasc Electrophysiol. 2008 Mar;19(3): 242–6.

## Ordering Information

Model	Tip	Curve	Spacing	French	Length	Order number
ALCath Red TC G FullCircle	4 mm	Red	2-5-2 mm	7F	110 cm	364537
ALCath Blue TC G FullCircle	4 mm	Blue	2-5-2 mm	7F	110 cm	364525
ALCath Green TC G FullCircle	4 mm	Green	2-5-2 mm	7F	110 cm	364533
ALCath Black TC G FullCircle	4 mm	Black	2-5-2 mm	7F	110 cm	364522
ALCath Cyan TC G FullCircle	4 mm	Cyan	2-5-2 mm	7F	110 cm	364529

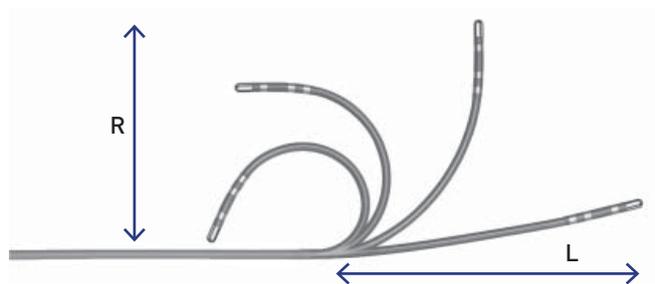
# AlCath G FullCircle

## Technical Data

Catheter specification	
Tip electrode size	4 mm
Tip electrode type	Non-irrigated
Tip temperature sensor	Thermocouple
Ring electrode size	1.55 mm
Number of electrodes	4
Electrode spacing	2-5-2 mm
Electrode material	Gold (Au)
Shaft diameter	7F (2.3 mm)
Braiding	Yes
Curve type	Red, Blue, Green, Black, Cyan
Curve shape	Steerable – FullCircle
Reach at 90° deflection	48mm, 57mm, 65mm, 73mm, 80mm
Length of the deflectable area	65mm, 75mm, 85mm, 95mm 105mm
Effective catheter length	110 cm
Connection plug	9-pole, REDEL
Patient cable	PK-109, 111, 112, 142, 143, 185

Patient cable	Ablation system	Order number
PK-109	Stockert EP-Shuttle	330 079
PK-111	Osyka HAT 300 Smart	330 080
PK-112	Medtronic Atakr, Radionics RFG 3-E	330 081
PK-142	IBI 1500	362 442
PK-143	Boston Scientific Maestro 3000	371 597
PK-185	BIOTRONIK AbControl MDS	345 954

Curve chart	Length L	Reach R
Red	65 mm	48 mm
Blue	75 mm	57 mm
Green	85 mm	65 mm
Black	95 mm	73 mm
Cyan	105 mm	80 mm



# ALCath FullCircle

4mm tip ablation catheter



## Product Highlights

- **FullCircle Deflection**  
Complete deflection to reach most challenging anatomical positions
- **SmoothMove Steering**  
Precise transfer of micromotion for maximum control
- **Quality and Functionality**  
Outstanding manufacturing and intuitive handling for best performance

## Ordering Information

Model	Tip	Curve	Spacing	French	Length	Order number
ALCath Red TC FullCircle	4 mm	Red	2-5-2 mm	7F	110 cm	364 536
ALCath Blue TC FullCircle	4 mm	Blue	2-5-2 mm	7F	110 cm	359 038
ALCath Green TC FullCircle	4 mm	Green	2-5-2 mm	7F	110 cm	364 532
ALCath Black TC FullCircle	4 mm	Black	2-5-2 mm	7F	110 cm	359 037
ALCath Cyan TC FullCircle	4 mm	Cyan	2-5-2 mm	7F	110 cm	364 528

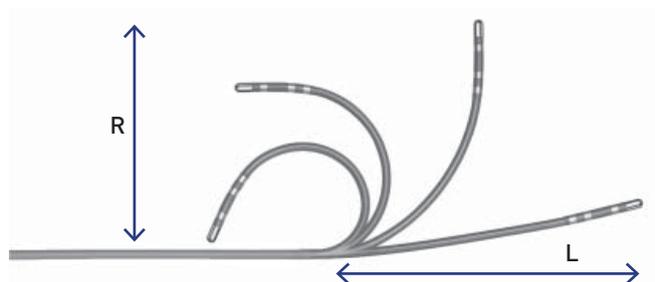
# AlCath FullCircle

## Technical Data

Catheter specification	
Tip electrode size	4 mm
Tip electrode type	Non-irrigated
Tip temperature sensor	Thermocouple
Ring electrode size	1.55 mm
Number of electrodes	4
Electrode spacing	2-5-2 mm
Electrode material	Platin Iridium (Pt/Ir)
Shaft diameter	7F (2.3 mm)
Braiding	Yes
Curve type	Red, Blue, Green, Black, Cyan
Curve shape	Steerable – FullCircle
Reach at 90° deflection	48mm, 57mm, 65mm, 73mm, 80mm
Length of the deflectable area	65mm, 75mm, 85mm, 95mm 105mm
Effective catheter length	110 cm
Connection plug	9-pole, REDEL
Patient cable	PK-109, 111, 112, 142, 143, 185

Patient cable	Ablation system	Order number
PK-109	Stockert EP-Shuttle	330 079
PK-111	Osypka HAT 300 Smart	330 080
PK-112	Medtronic Atakr, Radionics RFG 3-E	330 081
PK-142	IBI 1500	362 442
PK-143	Boston Scientific Maestro 3000	371 597
PK-185	BIOTRONIK AbControl MDS	345 954

Curve chart	Length L	Reach R
Red	65 mm	48 mm
Blue	75 mm	57 mm
Green	85 mm	65 mm
Black	95 mm	73 mm
Cyan	105 mm	80 mm



# Trignum Flux G

Irrigated GoldTip ablation catheter for magnetic navigation



## Product Highlights

- **GoldTip Ablation**  
Reduced incidence of thrombus formation during irrigated RF ablation<sup>1</sup>
- **Powerful Magnets**  
Precise magnetic navigation for safe and effective ablation
- **Intelligent Design**  
Small distance magnet spacing for optimal versatility also in challenging anatomies

<sup>1</sup> A. Ikeda et al., Circulation 2009; 120: S624.

## Ordering Information

Model	Tip	Curve	Spacing	French	Length	Order number
Trignum Flux G	5 mm irrigated	n/a	1-6-2 mm	7F	116 cm	365568

# Trignum Flux G

## Technical Data

Catheter specification		
Tip electrode size	5 mm	
Tip electrode type	Irrigated	
Tip temperature sensor	Thermocouple	
Ring electrode size	2 mm	
Number of electrodes	4	
Electrode spacing	1-6-2 mm	
Electrode material	Gold (Au)	
Shaft diameter	7F (2.3 mm)	
Braiding	Yes	
Number of magnets	3	
Magnet spacing	15.5-9.5 mm	
Reach at 90° deflection	Flexible	
Length of the deflectable area	Flexible	
Effective catheter length	116 cm	
Connection plug	9-pole, REDEL Luer-lock (female)	
Patient cable	PK-109, 111, 112, 142, 143, 185	

Patient cable	Ablation system	Order number
PK-109	Stockert EP-Shuttle	330 079
PK-111	Osyka HAT 300 Smart	330 080
PK-112	Medtronic Atakr, Radionics RFG 3-E	330 081
PK-142	IBI 1500	362 442
PK-143	Boston Scientific Maestro 3000	371 597
PK-185	BIOTRONIK AbControl MDS	345 954

# Diagnostic Catheters



# MultiCath 2-Pole

Multipolar catheters for  
electrophysiological diagnostics



## Product Highlights

- **Exact Measurement**  
Flexible catheter shaft for good tissue contact and signal quality
- **Precise Handling**  
Excellent torquability for fast positioning
- **More Opportunities**  
Perfectly suitable for all electrophysiological examinations

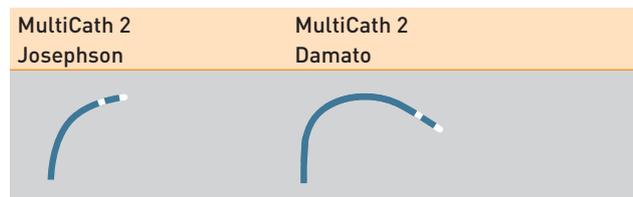
## Ordering Information

Model	Curve	Spacing	French	Length	Order number
MultiCath 2J 5mm 6F	Josephson	5 mm	6F	110 cm	351187
MultiCath 2D 5mm 6F	Damato	5 mm	6F	110 cm	351190

# MultiCath 2-Pole

## Technical Data

Catheter specification	
Tip electrode size	3.2 mm
Tip electrode type	Standard
Ring electrode size	2.2 mm
Number of electrodes	2
Electrode spacing	5 mm
Electrode material	Platin Iridium (Pt/Ir)
Shaft diameter	6F (2 mm)
Braiding	Yes
Curve type	Josephson, Damato
Curve shape	Fixed
Reach at 90° deflection	n/a
Length of the deflectable area	n/a
Effective catheter length	110 cm
Connection plug	REDEL
Patient cable	MPK-4-R



# MultiCath 4-Pole

Multipolar catheters for electrophysiological diagnostics



## Product Highlights

- Exact Measurement**  
 Flexible catheter shaft for good tissue contact and signal quality
- Precise Handling**  
 Excellent torquability for fast positioning
- Wide Product Range**  
 Various curve shapes and different shaft diameter and electrode spacing provides great flexibility

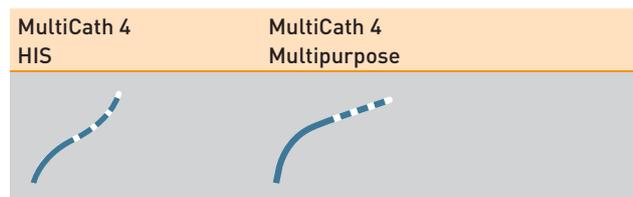
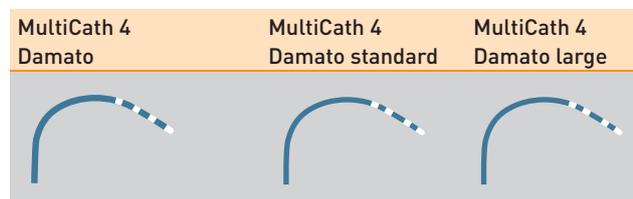
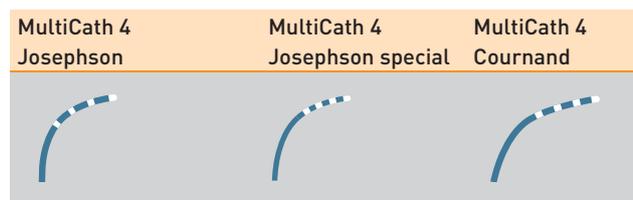
## Ordering Information

Model	Curve	Spacing	French	Length	Order number
MultiCath 4J sp 5mm 4F	Josephson special	5 mm	4F	100 cm	356 728
MultiCath 4J sp 2-5-2mm 4F	Josephson special	2-5-2 mm	4F	100 cm	356 727
MultiCath 4C 5mm 4F	Cournand	5 mm	4F	100 cm	356 726
MultiCath 4C 2-5-2mm 4F	Cournand	2-5-2 mm	4F	100 cm	356 725
MultiCath 4J sp 2mm 5F	Josephson special	2 mm	5F	80 cm	351 170
MultiCath 4J sp 5mm 5F	Josephson special	5 mm	5F	100 cm	356 434
MultiCath 4J sp 2-5-2mm 5F	Josephson special	2-5-2 mm	5F	80 cm	351 171
MultiCath 4J sp 2-5-2mm 5F	Josephson special	2-5-2 mm	5F	100 cm	356 433
MultiCath 4D st 2-5-2mm 5F	Damato standard	2-5-2 mm	5F	80 cm	351 175
MultiCath 4D la 2-5-2mm 5F	Damato large	2-5-2 mm	5F	80 cm	351 176
MultiCath 4C 2-5-2mm 5F	Cournand	2-5-2 mm	5F	80 cm	351 177
MultiCath 4HIS 5mm 5F	HIS	5 mm	5F	100 cm	359 385
MultiCath 4M 5mm 5F	Multipurpose	5 mm	5F	100 cm	359 387
MultiCath 4J 5mm 6F	Josephson	5 mm	6F	110 cm	351 185
MultiCath 4J 5mm 6F SoftTip	Josephson	5 mm	6F	110 cm	351 182
MultiCath 4D 5mm 6F	Damato	5 mm	6F	110 cm	351 189
MultiCath 4D 5mm 6F SoftTip	Damato	5 mm	6F	110 cm	351 181
MultiCath 4C 5mm 6F	Cournand	5 mm	6F	110 cm	351 188
MultiCath 4C 5mm 6F SoftTip	Cournand	5 mm	6F	110 cm	351 183
MultiCath 4M 5mm 6F	Multipurpose	5 mm	6F	110 cm	351 194
MultiCath 4M 5mm 6F SoftTip	Multipurpose	5 mm	6F	110 cm	351 180

# MultiCath 4-Pole

## Technical Data

Catheter specification	
Tip electrode size	3.2 mm
Tip electrode type	Standard, Soft Tip
Ring electrode size	2.2 mm; SoftTip: 1.3 mm
Number of electrodes	4
Electrode spacing	2mm, 5 mm, 2-5-2 mm
Electrode material	Platin Iridium (Pt/Ir)
Shaft diameter	4F (1.35 mm), 5F (1.67 mm), 6F (2 mm)
Braiding	Yes
Curve type	Josephson, Josephson special, Courmand, Damato, Damato standard, Damato large, HIS, Multipurpose
Curve shape	Fixed
Reach at 90° deflection	n/a
Length of the deflectable area	n/a
Effective catheter length (connector device sided)	80 cm, 100 cm, 110 cm
REDEL	
PatientCable	MPK-4-R



# MultiCath 5-Pole

Multipolar catheters for electrophysiological diagnostics



## Product Highlights

- **Exact Measurement**  
Flexible catheter shaft for good tissue contact and signal quality
- **Precise Handling**  
Excellent torquability for fast positioning
- **More Opportunities**  
Additional large spaced electrode for serving as floating reference

## Ordering Information

Model	Curve	Spacing	French	Length	Order number
MultiCath 5J 5-5-5-280mm 6F	Josephson	5-5-5-280 mm	6F	110 cm	369066

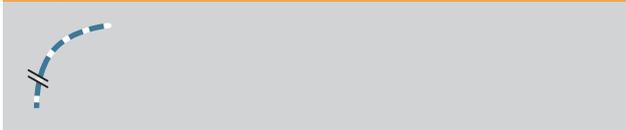
# MultiCath 5-Pole

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## Technical Data

Catheter specification	
Tip electrode size	3.2 mm
Tip electrode type	Standard
Ring electrode size	2.2 mm
Number of electrodes	5
Electrode spacing	5-5-5-280 mm
Electrode material	Platin Iridium (Pt/Ir)
Shaft diameter	6F (2 mm)
Braiding	Yes
Curve type	Josephson
Curve shape	Fixed
Reach at 90° deflection	n/a
Length of the deflectable area	n/a
Effective catheter length	110 cm
Connection plug	REDEL
Patient cable	MPK-10-R

### MultiCath 5 Josephson



# MultiCath 6-Pole

Multipolar catheters for  
electrophysiological diagnostics



## Product Highlights

- **Exact Measurement**  
Flexible catheter shaft for good tissue contact and signal quality
- **Precise Handling**  
Excellent torquability for fast positioning
- **More Opportunities**  
Perfectly suitable for all electrophysiological examinations

## Ordering Information

Model	Curve	Spacing	French	Length	Order number
MultiCath 6J sp 2-5-2mm 5F	Josephson special	2-5-2 mm	5F	80 cm	351173

# MultiCath 6-Pole

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## Technical Data

Catheter specification	
Tip electrode size	3.2 mm
Tip electrode type	Standard
Ring electrode size	2.2 mm
Number of electrodes	6
Electrode spacing	2-5-2 mm
Electrode material	Platin Iridium (Pt/Ir)
Shaft diameter	5F (1.67 mm)
Braiding	Yes
Curve type	Josephson special
Curve shape	Fixed
Reach at 90° deflection	n/a
Length of the deflectable area	n/a
Effective catheter length	80 cm
Connection plug	REDEL
Patient cable	MPK-10-R



# MultiCath 10-Pole

Multipolar catheters for electrophysiological diagnostics



## Product Highlights

- **Exact Measurement**  
Flexible catheter shaft for good tissue contact and signal quality
- **Precise Handling**  
Excellent torquability for fast positioning
- **Wide Product Range**  
Various curve shapes and different shaft diameter and electrode spacing provides great flexibility

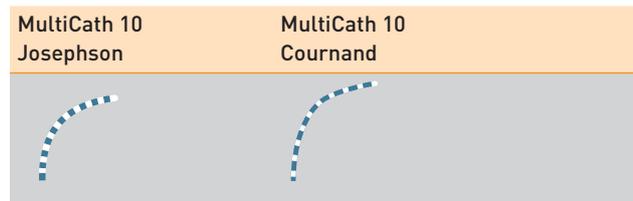
## Ordering Information

Model	Curve	Spacing	French	Length	Order number
MultiCath 10C 2mm 5F	Cournand	2 mm	5F	80 cm	351179
MultiCath 10J sp 2mm 5F	Josephson special	2 mm	5F	80 cm	351174
MultiCath 10J sp 2-5-2mm 5F	Josephson special	2-5-2 mm	5F	100 cm	359388
MultiCath 10J sp 2-8-2mm 5F	Josephson special	2-8-2 mm	5F	100 cm	359389
MultiCath 10J 2mm 6F	Josephson	2 mm	6F	110 cm	351186
MultiCath 10J 5mm 6F	Josephson	5 mm	6F	110 cm	351193
MultiCath 10J CS 2-5-2mm 6F	Josephson	2-5-2 mm	6F	110 cm	351192
MultiCath 10J CS 2-8-2mm 6F	Josephson	2-8-2 mm	6F	110 cm	351191

# MultiCath 10-Pole

## Technical Data

Catheter specification	
Tip electrode size	3.2 mm
Tip electrode type	Standard
Ring electrode size	1.3 mm
Number of electrodes	10
Electrode spacing	2 mm, 2-5-2 mm, 2-8-2 mm, 5 mm
Electrode material	Platin Iridium (Pt/Ir)
Shaft diameter	5F (1.67 mm) , 6F (2 mm)
Braiding	Yes
Curve type	Cournand, Josephson, Josephson special
Curve shape	Fixed
Reach at 90° deflection	n/a
Length of the deflectable area	n/a
Effective catheter length (connector device sided)	80 cm, 100 cm, 110 cm
REDEL	REDEL
Patient cable	MPK-10-R



# Woxx 4-Pole

Multipolar high-end diagnostic catheter



## Product Highlights

- **Curved Poles**  
Secure tissue contact and excellent signal quality
- **Woven Shaft Structure**  
High quality shaft structure for maximal stability
- **Atraumatic Tip Section**  
Exceptional safe steerability and torqueability

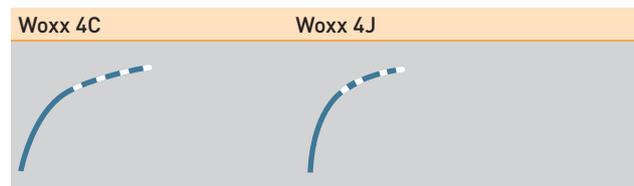
## Ordering Information

Model	Curve	Spacing	French	Length	Order number
Woxx 4C 5mm 5F	Cournand	5 mm	5F	110 cm	365413
Woxx 4J 2-5-2mm 5F	Josephson	2-5-2 mm	5F	110 cm	365414
Woxx 4J 5mm 5F	Josephson	5 mm	5F	110 cm	365415
Woxx 4C 5mm 6F	Cournand	5 mm	6F	110 cm	346670
Woxx 4J 2-5-2mm 6F	Josephson	2-5-2 mm	6F	110 cm	346671
Woxx 4J 5mm 6F	Josephson	5 mm	6F	110 cm	346672

# Woxx 4-Pole

## Technical Data

Catheter specification	
Tip electrode size	1 mm
Tip electrode type	Standard
Ring electrode size	1 mm
Number of electrodes	4
Electrode spacing	5 mm, 2-5-2 mm
Electrode material	Platin Iridium (Pt/Ir)
Shaft diameter	5F (1.67 mm), 6F (2 mm)
Braiding	Yes
Curve type	Josephson, Courmand
Curve shape	Fixed
Reach at 90° deflection	n/a
Length of the deflectable area	n/a
Effective catheter length	110 cm
Connection plug	REDEL
Patient cable	MPK-4-R



# Woxx 10-Pole

Multipolar high-end diagnostic catheter



## Product Highlights

- **Curved Poles**  
Secure tissue contact and excellent signal quality
- **Woven Shaft Structure**  
High quality shaft structure for maximal stability
- **Atraumatic Tip Section**  
Exceptional safe steerability and torqueability

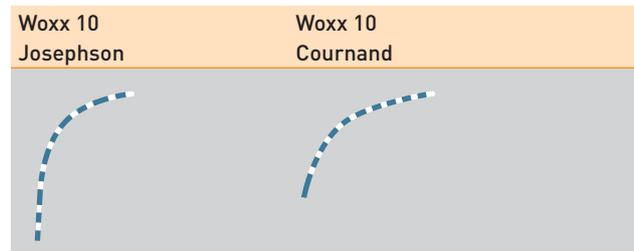
## Ordering Information

Model	Curve	Spacing	French	Length	Order number
Woxx 10J 2-5-2mm 5F	Josephson	2-5-2 mm	5F	110 cm	365416
Woxx 10C 2mm 6F	Cournand	2 mm	6F	110 cm	346729
Woxx 10C 5mm 6F	Cournand	5 mm	6F	110 cm	346730
Woxx 10J 2-5-2mm 6F	Josephson	2-5-2 mm	6F	110 cm	346667

# Woxx 10-Pole

## Technical Data

Catheter specification	
Tip electrode size	1 mm
Tip electrode type	Standard
Ring electrode size	1 mm
Number of electrodes	10
Electrode spacing	2 mm, 5 mm, 2-5-2 mm
Electrode material	Platin Iridium (Pt/Ir)
Shaft diameter	5F (1.67 mm), 6F (2 mm)
Braiding	Yes
Curve type	Josephson, Courmand
Curve shape	Fixed
Reach at 90° deflection	n/a
Length of the deflectable area	n/a
Effective catheter length	110 cm
Connection plug	REDEL
Patient cable	MPK-10-R



# ViaCath 4

Steerable diagnostic catheters



## Product Highlights

- **Easy Positioning**  
High lateral tip stability
- **Precise Measurement**  
Excellent signal quality
- **Excellent Handling**  
Outstanding pushability and torque transmission

## Ordering Information

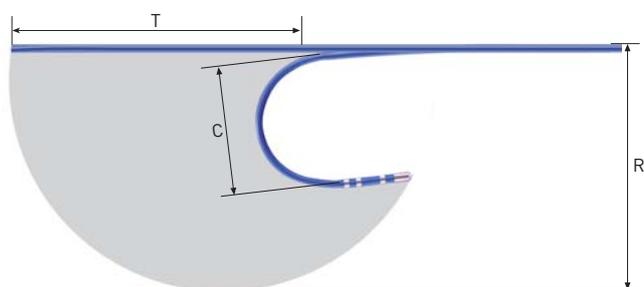
Model	Curve	Spacing	French	Length	Order number
ViaCath 4/S/5 mm	Standard	5 mm	6F	110 cm	351 197
ViaCath 4/S/10 mm	Standard	10 mm	6F	110 cm	351 196

# ViaCath 4

## Technical Data

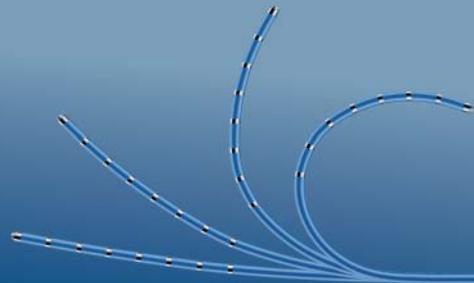
Catheter specification	
Tip electrode size	2 mm
Tip electrode type	Standard
Ring electrode size	1 mm
Number of electrodes	4
Electrode spacing	5 mm, 10 mm
Electrode material	Platin Iridium (Pt/Ir)
Shaft diameter	6F (2 mm)
Braiding	Yes
Curve type	Standard
Curve shape	Steerable
Reach at 90° deflection	60 mm
Length of the deflectable area	85 mm
Effective catheter length	110 cm
Connection plug	REDEL
Patient cable	MPK-4-R

Curve chart	TipT	Reach R	Curve diameter C
Standard	85 mm	60 mm	45 mm



# ViaCath 8

Steerable diagnostic catheters



## Product Highlights

- **Easy Positioning**  
High lateral tip stability
- **Precise Measurement**  
Excellent signal quality
- **Excellent Handling**  
Outstanding pushability and torque transmission

## Ordering Information

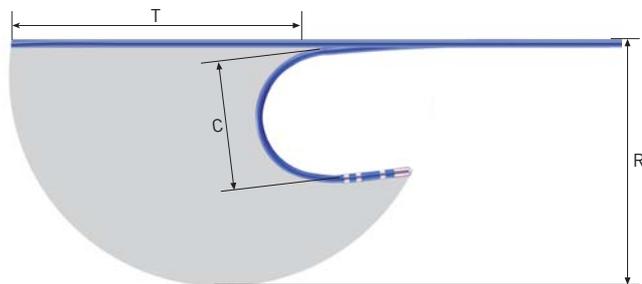
Model	Curve	Spacing	French	Length	Order number
ViaCath 8/S/5 mm	Standard	5 mm	6F	110 cm	351 198

# ViaCath 8

## Technical Data

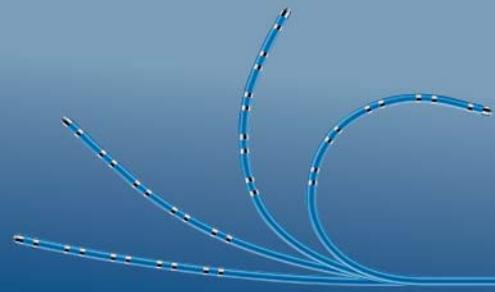
Catheter specification	
Tip electrode size	2 mm
Tip electrode type	Standard
Ring electrode size	1 mm
Number of electrodes	8
Electrode spacing	5 mm
Electrode material	Platin Iridium (Pt/Ir)
Shaft diameter	6F (2 mm)
Braiding	Yes
Curve type	Standard
Curve shape	Steerable
Reach at 90° deflection	60 mm
Length of the deflectable area	85 mm
Effective catheter length	110 cm
Connection plug	REDEL
Patient cable	MPK-10-R

Curve chart	TipT	Reach R	Curve diameter C
Standard	85 mm	60 mm	45 mm



# ViaCath 10

Steerable diagnostic catheters



## Product Highlights

- **Easy Positioning**  
High lateral tip stability
- **Precise Measurement**  
Excellent signal quality
- **Wide Product Range**  
Efficient and reliable mapping

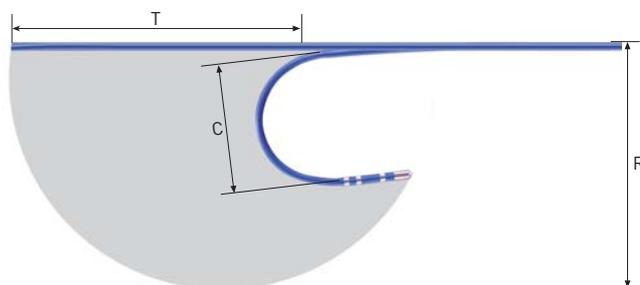
## Ordering Information

Model	Curve	Spacing	French	Length	Order number
ViaCath 10/S/2-6-2 mm	Standard	2-6-2 mm	6F	110 cm	351200
ViaCath 10/L/2-6-2 mm	Large	2-6-2 mm	6F	110 cm	358797
ViaCath 10/L/2-8-2 mm	Large	2-8-2 mm	6F	110 cm	370309
ViaCath 10/XL/2-10-2 mm	Extra large	2-10-2 mm	6F	110 cm	370144

## Technical Data

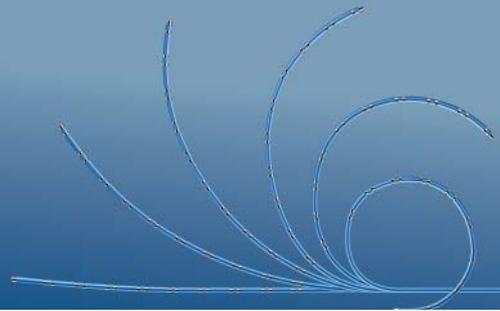
Catheter specification	
Tip electrode size	2 mm
Tip electrode type	Standard
Ring electrode size	1 mm
Number of electrodes	10
Electrode spacing	2-6-2, 2-8-2, 2-10-2 mm
Electrode material	Platin Iridium (Pt/Ir)
Shaft diameter	6F (2 mm)
Braiding	Yes
Curve type	Standard, Large, Extra Large
Curve shape	Steerable
Reach at 90° deflection	60 mm, 65 mm, 75 mm
Length of the deflectable area	85 mm, 95 mm, 105 mm
Effective catheter length	110 cm
Connection plug	REDEL
Patient cable	MPK-10-R

Curve chart	TipT	Reach R	Curve diameter C
Standard	85 mm	60 mm	45 mm
Large	95 mm	65 mm	50 mm
Extra Large – ViaCath 10	105 mm	75 mm	60 mm



# ViaCath 20

Steerable diagnostic catheters



## Product Highlights

- **Precise Measurement**  
20-poles especially for the diagnosis of atrial tachycardias
- **Excellent Handling**  
Outstanding pushability and torque transmission
- **Easy Positioning**  
High lateral tip stability

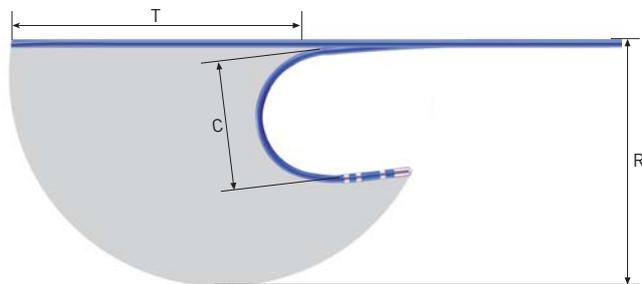
## Ordering Information

Model	Curve	Spacing	French	Length	Order number
ViaCath 20/XL/2-8-2 mm	Extra Large	2-8-2 mm	6F	90 cm	351201

## Technical Data

Catheter specification	
Tip electrode size	2 mm
Tip electrode type	Standard
Ring electrode size	1 mm
Number of electrodes	20
Electrode spacing	2-8-2 mm
Electrode material	Platin Iridium (Pt/Ir)
Shaft diameter	6F (2 mm)
Braiding	Yes
Curve type	Extra Large
Curve shape	Steerable
Reach at 90° deflection	100 mm
Length of the deflectable area	155 mm
Effective catheter length	90 cm
Connection plug	REDEL
Patient cable	2 x MPK-10-R

Curve chart	TipT	Reach R	Curve diameter C
Extra Large – ViaCath 20	155 mm	100 mm	52 mm



# Lexx

Atraumatic stability. Reliable mapping.



## Product Highlights

- **Easy Handling**  
Two finger rotation ring, maximal deflection, ergonomically designed
- **Atraumatic Stability**  
Atraumatic design and variable StableLoop
- **Reliable Mapping**  
Quick, stable and safe positioning

## Ordering Information

Model	Curve	Spacing	French	Length	Order number
Lexx	Blue	6 mm	7F	100 cm	351 195

## Technical Data

Catheter specification	
Tip electrode size	3.5 mm
Tip electrode type	Standard
Ring electrode size	1 mm
Number of electrodes	10
Electrode spacing	6 mm
Electrode material	Platin Iridium (Pt/Ir)
Shaft diameter	7F (2.3 mm)
Braiding	Yes
Curve type	Blue
Curve shape	Steerable – variable loop
Max. deflection	110°
Reach at 90° deflection	55 mm
Loop Diameter	15–25 mm
Effective catheter length	100 cm
Connection plug	REDEL
Patient cable	MPK-10-R

# Temporary Pacing Catheters



# TC-114

Catheter for temporary transvenous pacing



## Product Highlights

- **Great Compatibility**  
Suitable for all common external pacemakers
- **Precise Measurement**  
Pole section is ideally suited to heart's complex structures
- **Fluoroscopic visibility**  
Easy identification under fluoroscopy vision

## Ordering Information

Model	Curve	Spacing	French	Length	Order number
TC-114 C	Cournand	7 mm	4F	114 cm	352015

## Technical Data

Catheter specification	
Product packaging contains	Temporary catheter, introducer set
Tip electrode size	4 mm
Tip electrode type	Standard
Ring electrode size	3 mm
Number of electrodes	2
Electrode spacing	7 mm
Electrode material	Stainless steel
Shaft diameter	4F (1.35 mm)
Braiding	No
Curve type	Cournand
Curve shape	Fixed
Reach at 90° deflection	n/a
Length of the deflectable area	n/a
Effective catheter length	114 cm
Connection plug	2 x 2 mm pins, touch proof
Patient cable	Connector kit

# TC-115

Catheter for temporary transvenous pacing



## Product Highlights

- **Great Compatibility**  
Suitable for all common external pacemakers
- **Wide Range of Applications**  
From emergency medicine to electrophysiological examinations
- **TC Pro**  
High shaft construction quality for ideal force transmission

## Ordering Information

Model	Curve	Spacing	French	Length	Order number
TC-115 C	Cournand	7 mm	5F	114 cm	352016
TC-115 J Pro	Josephson	5 mm	5F	114 cm	356320
TC-115 C Pro	Cournand	5 mm	5F	114 cm	356319

## Technical Data

Catheter specification	
Product packaging contains	Temporary catheter, introducer set
Tip electrode size	4 mm
Tip electrode type	Standard
Ring electrode size	3 mm
Number of electrodes	2
Electrode spacing	7 mm, TC Pro versions: 5mm
Electrode material	Stainless steel
Shaft diameter	5F (1.67 mm)
Braiding	No, TC Pro versions: Yes
Curve type	Josephson, Cournand
Curve shape	Fixed
Reach at 90° deflection	n/a
Length of the deflectable area	n/a
Effective catheter length	114 cm
Connection plug	2 x 2 mm pins, touch proof
Patient cable	Connector kit

# TC-115 Balloon

Catheter for temporary transvenous pacing



## Product Highlights

- **Great Compatibility**  
Suitable for all common external pacemakers
- **Bipolar flow-directed Balloon Catheter**  
Uses blood flow for easy introduction
- **Wide Range of Applications**  
From emergency medicine to electrophysiological examinations

## Ordering Information

Model	Curve	Spacing	French	Length	Order number
TC-115 Balloon	Josephson	10 mm	5F	110 cm	356318

# TC-115 Balloon

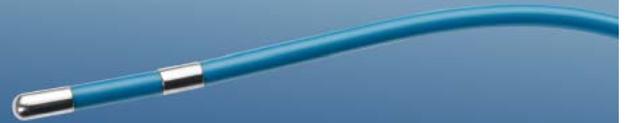
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## Technical Data

Catheter specification	
Product packaging contains	Temporary catheter, syringe
Tip electrode size	4 mm
Tip electrode type	Balloon
Ring electrode size	3 mm
Number of electrodes	2
Electrode spacing	10 mm
Electrode material	Stainless steel
Balloon diameter	10 mm
Shaft diameter	5F (1.67 mm)
Braiding	No
Curve type	Josephson
Curve shape	Fixed
Reach at 90° deflection	n/a
Length of the deflectable area	n/a
Effective catheter length	110 cm
Connection plug	2 x 2 mm pins, touch proof
Patient cable	Connector kit

# TC-116

Catheter for temporary transvenous pacing



## Product Highlights

- **Great Compatibility**  
Suitable for all common external pacemakers
- **Wide Range of Applications**  
From emergency medicine to electrophysiological examinations
- **Precise Measurement**  
Pole section is ideally suited to heart's complex structures

## Ordering Information

Model	Curve	Spacing	French	Length	Order number
TC-116 C	Cournand	7 mm	6F	114 cm	352018

## Technical Data

Catheter specification	
Product packaging contains	Temporary catheter, introducer set
Tip electrode size	4 mm
Tip electrode type	Standard
Ring electrode size	3 mm
Number of electrodes	2
Electrode spacing	7 mm
Electrode material	Stainless steel
Shaft diameter	6F (2.0 mm)
Braiding	No
Curve type	Cournand
Curve shape	Fixed
Reach at 90° deflection	n/a
Length of the deflectable area	n/a
Effective catheter length	114 cm
Connection plug	2 x 2 mm pins, touch proof
Patient cable	Connector kit

# TC-116 Screw

Catheter for temporary transvenous pacing



## Product Highlights

- **TC-116 Screw**  
Securely positioning with a stable screw and retractable stylet
- **Great Compatibility**  
Suitable for all common external pacemakers
- **Precise Measurement**  
Pole section is ideally suited to heart's complex structures

## Ordering Information

Model	Curve	Spacing	French	Length	Order number
TC-116 Screw	Straight	11 mm	6F	114 cm	352543

# TC-116 Screw

---

## Technical Data

Catheter specification	
Product packaging contains	Temporary catheter including stylet, introducer set
Tip electrode size	2 mm
Tip electrode type	Screw
Ring electrode size	3 mm
Number of electrodes	2
Electrode spacing	11 mm
Electrode material	Stainless steel
Shaft diameter	6F (2.0 mm)
Braiding	No
Curve type	Straight
Curve shape	-
Reach at 90° deflection	n/a
Length of the deflectable area	n/a
Effective catheter length	114 cm
Connection plug	2 x 2 mm pins, touch proof
Patient cable	Connector kit

# External Devices

# UHS 3000

Electrophysiologic innovation in a modular design



## Product Highlights

- **Electrophysiologic Innovation**  
 Modular, multichannel device with proven functionality and handling due to established UHS 20
- **Dual Channel**  
 Two alternative stimulation / sensing channels and one additional sensing channel
- **Two-Room Installation**  
 Separate setup of control and stimulation unit up to distance of 30 m

## Ordering Information

Model	Length	Order number
UHS 3000 with Accessories:		338 029
UHS 3000 Control Unit		(339 779)
UHS 3000 Stim. Unit		(339 780)
Foil cover UHS / AbControl		(123 399)
NK-3	2.5 m	(107 526)
VK-107	0.12 m	(347 302)
PK-128	2.8 m	(339 818)

Model	Length	Order number
Optional Accessories:		338 029
NK-11	2.5 m	128 865
VK-107	4.0 m	342 818
VK-107	15.0 m	342 820
VK-107	30.0 m	342 819
VK-112	2.0 m	347 304
VK-115	2.7 m	348 466
AdapterSet*	3.0 m	358 004

\* AdapterSet for operating the UHS 3000 with EPControl (System D).

## Technical Data

### UHS 3000 with accessories

#### Specifications

Supply Voltage	100 – 115 VAC / 60 Hz or 220 – 230 VAC / 50 Hz
Supply Voltage	2 A, inert
Max. Power Input	< 10 W
Operation Display	green LED on front side of stimulation unit
Safety Class	I (DIN EN60601-1 sect. 5.1)
Dimensions	Approx. 315 x 330 x 390 mm
Weight	Approx. 6 kg
Order number	328 029

#### Stimulation parameters

Pacing Modes	Fixed, Inhibited, Sensed, SNRT, WCL, DUAL Mode, High Rate
Number of Stimulation Channels	2
Pulse Amplitude [A+V]	0.1 – 12 V
Pulse Width [A+V]	0.1 – 2.9 ms
Sensitivity	1 – 20 mV
Refractory Period	130 – 600 ms
Selection of Trigger Site [Sensing Site]	Selectable from: stim.site, external trigger, sensing channel (only DUAL Mode)
Display of Measured Spontaneous intervals	Refractory time set to 4000 ms
Definition of Minimally Adjustable Basic interval S1-S1 for the Modes Fixed, Inhibited, Sensed, SNRT, WKD	200 – 150ms
Display of Lead Impedance	Warning, if impedance < 20 or > 2500 Ω No warning, if impedance > 50 or < 2000 Ω
Volume of signal and brightness of background lighting adjustable	

#### Parameters for Modes Fixed, Inhibited, Sensed for the Indication of Extra Stimuli

Stimulation Mode	Fixed, Inhibited, Sensed
Possibility of PES Delivery	
Selection of Channel for PES Delivery	Channel 1 or 2
PES Modi	OFF, MANUAL, AUTO INC, AUTO DEC
Setting Interval [S1 – S1]	Min. basic interval – 3000 ms
Setting Interval [S1 – S2]	15 [lower range limit] – 3000 ms
Setting Intervals [S2 – S3, S3 – S4, S4 – S5]	15 [lower range limit] – 1500 ms
Setting Number of Consequential intervals [S2 – S4]	Any consequential interval can be deactivated, except S1-S2. All delays following a deactivated delay are deactivated.
Selection of Actual Delay [Auto-Delay]	Each consequential interval can be defined as Actual Delay
Setting Upper and Lower Step Width for Automatic Increment/Decrement of the Actual Delays	1 – 99 ms
Setting Switch between Upper and Lower Step Width	200 – 600 ms
Setting Inhibition Cycles	0 – 99
Setting Behavior after Delivery of Consequential Intervals	Selectable: Pause or Stop
Setting Pause after Delivery of Consequential Intervals	2 – 59 s, in Sensed Mode 0 – 59 s

#### Parameters for SNRT Mode ( Sinus Node Recovery Time)

Pacing Mode for Measurement of SNRT	Mode "SNRT"
Selecting Stimulation Channel	Channel 1 or 2
Setting Stimulation Interval [S1 – S1]	Min. basic interval – 3000 ms
Setting Unit for Stimulation interval	ms or ppm
Setting Stimulation Duration	10 – 120 s
Setting Measurement Time after Stimulation	5 – 20 s
Display of Post-Stimulation Pause after Stimulation	Display of: primary pause, secondary pause, tertiary pause, quartary pause

#### Parameter for WCL Mode (Wenckebach Cycle Length)

Stimulation Mode for Measuring the Wenckebach Point	Mode "WCL"
Selecting Stimulation Channel	Channel 1 or 2
Setting Start Value for Stimulation Interval [S1 – S1]	Stop value – 3000 ms
Setting Stop Value for Stimulation Interval [S1 – S1]	Min. basic interval to start value
Setting Units for Start and Stop Value	ms or ppm
Setting Abbreviation Interval [Step-Size]	-1 to -99 ms (+1 to +10 ppm)
Setting Number Cycles before Decrement	10 – 99
Displaying Current Stimulation Interval [S1 – S1]	In the range of start value to stop value

#### Parameter for DUAL Mode

Stimulation Mode DUAL Mode	Mode "DUAL"
Selecting Sensing Channel [Trigger Location]	Selectable from : Stimulation channel 1, Stimulation channel 2, Sensing channel, external trigger
Selecting Stimulation Channel	Stimulation channel 1 or 2
Setting Delay between Sensing and Stim.	5 – 9999 ms
Setting Minimum Basic Interval	Min. Basic – 3000 ms
Types of Stimulation	
Sensitivity Setting	Separate setting for sense or stimulating channel
Setting Stimulation Amplitude and Pulse Width	For the stimulation channel selected within the limits as defined in section 1.1
Displaying Spontaneous intervals Measured on the Sensing Channel	Min. Basic – 4000 ms

#### Parameter for High Rate Mode

Stimulation Mode for High Rate Stimulation	Mode "High Rate"
Setting High Rate	50 – 1200 ms, respectively 1200 – 50 ppm
Adapting High Rate to Heart Rate	Selectable from: manually, adaptive
Selecting Unit for High Rate interval	In the unit set for High Rate Interval [ms/ppm]; in %
Defining Adaption Value	If ppm is the unit for High Rate interval: 105 – 200% or +5 to +95 ppm; If ms is the unit for High Rate Interval: 95 – 50% or -5 to -95 ms
Lower Limitation Value for Pulse Width Sensing Site	1 – 2.0 ms Always stimulation site

#### Permissible environmental conditions

Operating Temperature	10 – 50 °C
Relative Humidity	30 – 75% [not condensing]
Air Pressure	700 – 1060 hPa [10.15 – 15.40 lb/in <sup>2</sup> ]
Fluctuation in Supply Voltage	max. +/- 10%
Splash Water Resistance	None [IP30]
Disinfection Durability	Accord. to IEC 601-1, sect. 44.7

#### Permissible environmental conditions

Storage Temperature	0 – 50 °C
Relative Humidity	30 – 75% [not condensing]

#### UHS 3000 with accessories

UHS 3000 with accessories	Complete system
	Parts:
UHS 3000 Control Unit	Control Unit
UHS 3000 Stim Unit	Stimulation Unit
GA	Technical manual [English]
Foil cover UHS / AbControl	Sterile cover
NK-3 / 2.5 m	Power cable with right-angle plug
VK-107 / 0.12 m	Serial ribbon cable to connect the Control Unit with the Stimulation Unit; longer cables optional
PK-128 / 2.8 m	Sterile patient cable on patient connector for connecting diagnostic catheters
	<b>Note:</b> For operating the UHS 3000 in conjunction with EPCControl (System D), the EPCControl (System D) requires the following accessories:
VK-112 / 2.0 m	Connecting cable on patient connector for connecting the UHS 3000 with EPCControl D
VK-115 / 2.70 m	Connecting cable on marker connector for connecting the UHS 3000 with EPCControl (System)
AdapterSet for operating the UHS 3000 with EPCControl (System D)	AdapterBox VK-62, 2.5 m: cable to connect to the physician's PC of EPCControl VK-74, 2.0 m: cable to connect to the ethernet connection of UHS 3000 further lengths optional

#### Optional accessories

NK-11 / 3 m	Power cable with straight plug
VK-107 / 4.0 m 15.0 m 30.0 m	Connecting cable on serial connector for connecting the Control Unit with the Stimulation Unit; short ribbon cable supplied as standard

# Qiona

Ease of Use. Ease of Mind.



## Product Highlights

- **Ease of Use**  
Ready to flush in just two steps
- **Ease of Mind**  
Bubble sensor, bottle depletion control and tube pressure monitor, each with alarm
- **Freedom of Choice**  
Compatibility with all common RF generators

## Ordering Information

Model	Length	Order number
Qiona		363 270
Sterile Cover Hood		123 399
Qiona Foot Switch	5.0 m	365 773
Qiona AutoFlow Sensor	4.0 m	365 774
Qiona Pole Adapter Set		377 184

### Optional Accessories:

Qiona Tube Set incl. Extension	4.5 m	365 775
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## Technical Data

General information	
Dimensions	225 mm x 240 mm x 170 mm
Weight	Approx. 5 kg
Noise pressure level	56 dB(A) at output of 30 ml/min
Electrical connection	
Voltage	100 – 240 VAC (alternating voltage)
Frequency	50 – 60 Hz
Current consumption	0.7 – 0.3 A
Safety fuse	T 3.15 A / 250 V
Protection class	I
Degree of protection	IP 51
Applied part CF (defibrillation-proof)	Quiona Tube Set incl. Extension
Operating conditions	
Temperature	+10° C to +50° C
Humidity	30 to 75 % rel. humidity
Key technical data	
Low flow	1 – 10 ml/min
High flow	(low flow +1) – 50 ml/min
Flush flow rate	50 ml/min
Flow rate accuracy	-10 % to +20 % at 1 to 5 ml/min -5 % to +10 % at 5 to 30 ml/min -10 % to +20 % at 30 to 50 ml/min
Automatic flow control	with Qiona AutoFlow Sensor compatible to all common ablation generators
Bubble indicator sensitivity	2 µl
Additional optical bubble indicator	also active during flushing
High pressure indicator	shuts down pump and gives alarm irrigation lumen is blocked
Working pressure range	0 bar – 3.5 bar
Dynamic pressure switch off	approximately 2 bar above working pressure
Accumulated irrigation volume	indication on display
Optional alarm for bottle depletion for bottle sizes	250 – 5000 ml
Alarm indication	intuitive icons plus acoustic warning
Display	high resolution color display, adjustable brightness / contrast

# Accessories



# HeartSpan<sup>1</sup> Non-Steerable Sheath

Full range of transseptal access



## Product Highlights

- **Optimal Visibility**  
Embedded platinum fluoroscopy marker
- **Optimal Control**  
Braided shaft and matching curve dilator
- **Wide Product Range**  
Multiple curve angles available ranging from 15°-150°, in two different lengths

## Ordering Information

Model	Sheath inner diameter	Sheath outer diameter	Sheath length	Sheath curve type	Order number
FCL-160-00 HeartSpan Sheath 60cm 15°	8.5F (2.83mm)	11.0F (3.66mm)	60.0cm	15°	382364
FCL-160-01 HeartSpan Sheath 60cm 30°	8.5F (2.83mm)	11.0F (3.66mm)	60.0cm	30°	382365
FCL-160-02 HeartSpan Sheath 60cm 55°	8.5F (2.83mm)	11.0F (3.66mm)	60.0cm	55°	382366
FCL-160-03 HeartSpan Sheath 60cm 120° short	8.5F (2.83mm)	11.0F (3.66mm)	60.0cm	120° short	382367
FCL-160-04 HeartSpan Sheath 60cm 120° long	8.5F (2.83mm)	11.0F (3.66mm)	60.0cm	120° long	382368
FCL-160-05 HeartSpan Sheath 60cm 150°	8.5F (2.83mm)	11.0F (3.66mm)	60.0cm	150°	382369
FCL-160-06 HeartSpan Sheath 79cm 15°	8.5F (2.83mm)	11.0F (3.66mm)	79.4cm	15°	382370
FCL-160-07 HeartSpan Sheath 79cm 55°	8.5F (2.83mm)	11.0F (3.66mm)	79.4cm	55°	382371
FCL-160-08 HeartSpan Sheath 79cm 90°	8.5F (2.83mm)	11.0F (3.66mm)	79.4cm	90°	382372
FCL-160-09 HeartSpan Sheath 79cm 120° long	8.5F (2.83mm)	11.0F (3.66mm)	79.4cm	120°	382373

# HeartSpan Non-Steerable Sheath

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## Technical Data

Sheath specification	
Product packaging contains	Sheath, dilator, guidewire
Sheath inner diameter	8.5F (2.83mm)
Sheath outer diameter	11.0F (3.66mm)
Usable length of the sheath	60cm, 79.4cm
Usable length of dilator	65cm, 85cm
Sheath radiopaque marker	Platinum band marker
Sheath curve angles	15°, 30°, 55°, 90°, 120° short, 120° long, 150°
Dilator curve angles	15°, 30°, 55°, 90°, 120° short, 120° long, 150°
Guide Wire maximal outer diameter	0,035" inch
Guide Wire length	135cm

1 HeartSpan is a registered trademark of Merit Medical Systems, Inc.

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are subject to modification,  
revision and improvement.

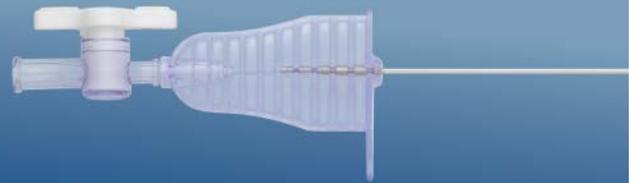
BIOTRONIK SE & Co. KG  
Woermannkehe 1  
12359 Berlin · Germany  
[www.biotronik.com](http://www.biotronik.com)

Manufacturer  
Merit Medical Systems, Inc.  
65 Great Valley Parkway  
Malvern, PA 19355  
USA

 **BIOTRONIK**  
excellence for life

# HeartSpan<sup>1</sup> Needles

Full range of transseptal access



## Product Highlights

- **Optimal Control**  
Ergonomic light weight handle for better control of the needle
- **Optimal Safety**  
Stylet locks onto needle for secure insertions
- **Wide Product Range**  
Multiple lengths available ranging from 71cm – 98cm, in two different curve angles

## Ordering Information

Name	Proximal size	Needle inner diameter	Needle length	Curve angle	Order number
FND-019-01 HeartSpan Needle 71 cm 50°	18 G	0.38 mm	71 cm	50°	363582
FND-019-02 HeartSpan Needle 71 cm 86°	18 G	0.38 mm	71 cm	86°	363583
FND-019-03 HeartSpan Needle 89 cm 50°	18 G	0.38 mm	89 cm	50°	363584
FND-019-05 HeartSpan Needle 98 cm 50°	18 G	0.38 mm	98 cm	50°	391245
FND-019-06 HeartSpan Needle 98 cm 86°	18 G	0.38 mm	98 cm	86°	391246

# HeartSpan Needles

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## Technical Data

Sheath specification	
Product packaging contains	Needle, stylet
Needle inner diameter	0.38mm
Needle length	71cm, 89cm, 98cm
Needle curve angles	50°, 86°
Needle size	18 Gauge

1 HeartSpan is a registered trademark of Merit Medical Systems, Inc.

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BIOTRONIK SE & Co. KG  
Woermannkehe 1  
12359 Berlin · Germany  
[www.biotronik.com](http://www.biotronik.com)

Manufacturer  
Merit Medical Systems, Inc.  
65 Great Valley Parkway  
Malvern, PA 19355  
USA



# Patient Cables

Connection cables for ablation catheters



## Product Highlights

- **Flexibility**

All BIOTRONIK ablation catheters connect to all major RF ablation generator

Patient cables can be resterilized.  
Amount of resterilization cycles and procedure according to technical manual.

## Ordering Information

Model	Length	Order number
PK-109	2.5 m	330 970
PK-111	2.0 m	330 080
PK-112	2.0 m	330 081
PK-142	2.5 m	362 442
PK-143	2.5 m	371 597
PK-185	2.5 m	345 945

# Patient Cables

## Technical Data

Patient cable	Cable length	Suitable for connection to	Order number
PK-109	2.5 m	Stockert EP-Shuttle	330 079
PK-111	2.0 m	Osypka HAT 300 Smart	330 080
PK-112	2.0 m	Medtronic Atakr, Radionics RFG 3-E	330 081
PK-142	2.5 m	IBI 1500	362 442
PK-143	2.5 m	Boston Scientific Maestro 3000	371 597
PK-185	2.5 m	BIOTRONIK AbControl MDS	345 954

## Generator Connection Side

## Ablation Catheter Connection Side

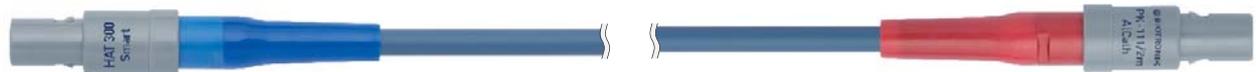
### Stockert EP-Shuttle

PK-109



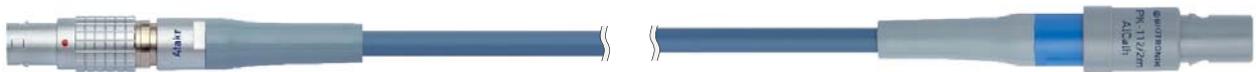
### Osypka HAT 300 Smart

PK-111



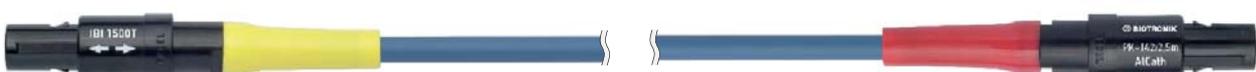
### Medtronic Atakr, Radionics RFG 3-E

PK-112



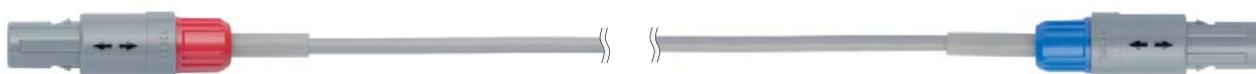
### IBI 1500

PK-142



### Boston Scientific Maestro 3000

PK-143



### BIOTRONIK AbControl MDS

PK-185



# Patient Cables

Connection cables for diagnostic catheters



## Product Highlights

- **Flexibility**

All BIOTRONIK diagnostic catheters connect to Stimulators and EP recording systems

MPK-R cables can be resterilized.  
Amount of resterilization cycles and procedure according to technical manual.

## Ordering Information

Model	Length	Order number
MPK-4-R	2.0 m	353 177
MPK-10-R	2.0 m	353 173

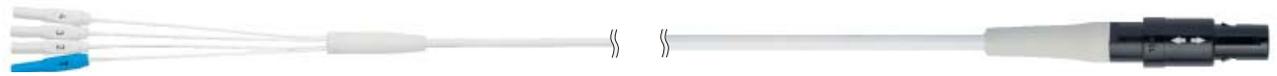
# Patient Cables

## Technical Data

Patient cable	Cable length	Suitable for connection to	Order number
MPK-4-R	2m	MultiCath: 2 and 4 poles Woxx: 4 poles ViaCath: 4 poles	353 177
MPK-10-R	2m	MultiCath: 5, 6 and 10 poles Woxx: 10 poles ViaCath: 8 and 10 poles Lexx: 10 poles	353 173

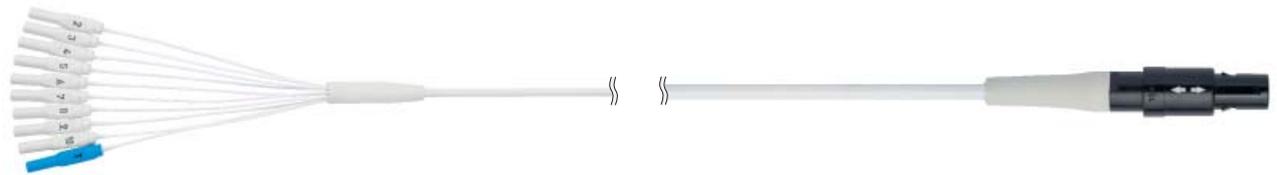
MultiCath: 2 and 4 poles, Woxx: 4 poles, ViaCath: 4 poles

MPK-4-R



MultiCath: 5, 6 and 10 poles, Woxx: 10 poles, ViaCath: 8 and 10 poles, Lexx: 10 poles

MPK-10-R



# Patient Cables

Connection cables for temporary pacing catheters

## Product Highlights

- **Flexibility**

All BIOTRONIK temporary pacing catheters connect to external pacemaker and stimulator

To connect the catheter to devices which do not have shrouded 2mm pin connectors, please use adapters such as TC<sup>®</sup> Adapter Kit, which are optionally available. Please observe the adapter's user manual.

## Ordering Information

Model	Length	Order number
TC Adapter Kit		380390
PK-67-S	0.8 m	128085
PD-67-L	2.6 m	123672
PA-1-C		349723

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BIOTRONIK SE & Co. KG  
Woermannkehe 1  
12359 Berlin · Germany  
[www.biotronik.com](http://www.biotronik.com)

Manufacturer  
VascoMed GmbH  
Hertzallee 1  
79589 Binzen · Germany



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# BIOTRONIK Product Catalog

## Electrophysiology