

### **Applicator Guide**

# Brachytherapy Applicators

At Elekta we believe that our solutions, services and extensive knowledge of precisely targeted radiation therapy play a vital role in the successful treatment of cancer. Our key technological advances have resulted in an integrated package of brachytherapy treatment planning and delivery systems. This applicator guide provides a comprehensive overview of the Elekta applicator portfolio for brachytherapy.









### Elekta Brachytherapy

Elekta Brachytherapy solutions are part of Elekta's leading radiation therapy portfolio and encompass more than 40 years of Nucletron® innovations. The latest advancements include Flexitron® treatment delivery, new Oncentra® Brachy treatment planning modules- and a variety of new and innovative applicators.

### Industry-leading brachytherapy applicator portfolio

Applicators are a pivotal part of Elekta's fully integrated solutions. With a broad portfolio of dedicated applicators, we offer a complete applicator range for more than 15 types of cancer in a variety of anatomies, developed in close collaboration with clinical experts. With applicators that are leading in 3D imaging compatibility as well as a legacy of 2D products, you can select from the largest applicator portfolio to match your choice of treatment and clinical setup.

### Flexitron treatment delivery

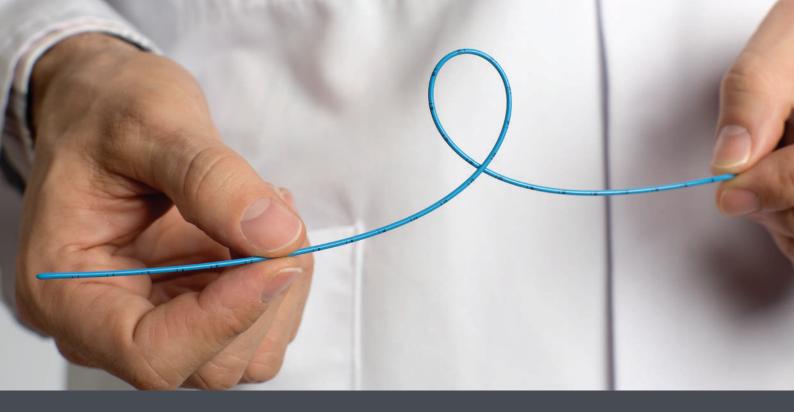
Elekta's afterloading platforms have established an unparalleled reputation for reliability, safety and performance in treatment delivery. Their all-in-one versatility and unmatched flexibility prove their value on a daily basis in the majority of brachytherapy institutes around the world.

The new 'Safety through simplicity' Flexitron family is designed for safety and better team efficiency. With more logic and fewer variables, the Flexitron afterloading platform optimizes the treatment delivery process and offers you a safe investment for today and in the future.

### **Oncentra Brachy treatment planning**

With the Oncentra Brachy treatment planning system, the creation of highly conformal plans in an efficient workflow is within reach. The latest version of Oncentra Brachy offers a series of useful tools that facilitate many repetitive tasks for you such as contouring and reconstruction. Oncentra Brachy buys you time to focus on what matters: designing the optimal dose distribution.

When Oncentra Brachy treatment planning is used in combination with the new Flexitron afterloading platform, you will optimally benefit from a number of smart features that allow an easy, standardized way of treatment planning—while feeling confident about accurate and safe treatment delivery.



### How to use this applicator guide

In this applicator guide, brachytherapy applicators are presented by body site. When a particular applicator can also be used for other body sites, a cross reference is given on the index page at the start of the relevant applicator section.

The applicators and optional items in this guide are designed for use with the Flexitron and microSelectron afterloaders only. Applicators and optional items specific to Flexitron or microSelectron are so indicated. Corresponding transfer tubes, x-ray catheters and CT and MRI markers per applicator and afterloader type can be found in the appendixes.

#### Consumables information:

- single use, delivered sterile
- single use, delivered non-sterile

### **Sterilization advice**

Sterilization advice provided in this document is indicative and applies to newly purchased applicators. For more information regarding sterilization of a particular applicator, please consult the User Manual or Sterilization Advice Chart.

The contents of this document are subject to change without notice. All rights reserved. **Comments or questions may be directed to brachytherapy@elekta.com.** 

#### Safety in the magnetic resonance environment

The symbols shown below are used to indicate safety of medical devices in the magnetic resonance environment.



**MR safe:** An item that poses no known hazards in all MR environments (1.5T, 3T, 6T and others).



**MR conditional:** An item that has been demonstrated to pose no known hazards in a specified MR environment with specified conditions of use (specified in the User Manual, typically compatible for 1.5T and 3T MR environment).



**MR unsafe:** An item that is known to pose hazards in all MRI environments.

#### Note:

Not all products in this guide are available in all markets. Please contact your local Elekta representative for more information.

Applicators as mentioned in this guide can be used with both Iridium-192 and Cobalt-60 afterloaders, except for the Valencia and Leipzig applicators.

If no information is provided under 'part number,' this item cannot be ordered separately.

This applicator user guide should only be considered as a overview for ordering information. For more details please refer to the latest version of each applicator's corresponding manual.

For the latest version of a specific manual, please contact your local sales representative.

References to literature are not included in this guide.

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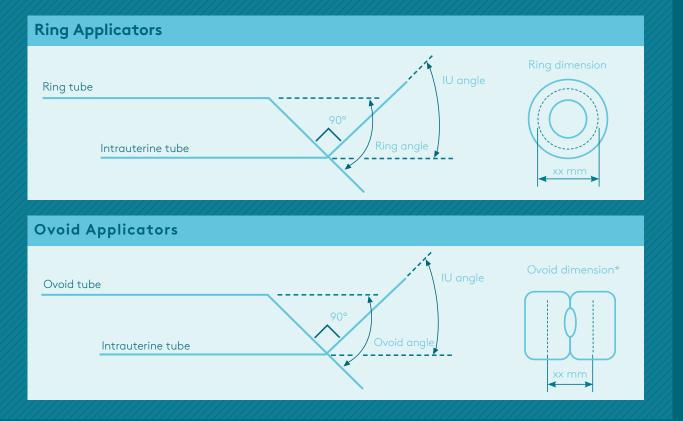
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Visit elekta.com/brachytherapy for the most up-to-date applicator overview

# Gynecology

### **Gynecology Applicator Dimensions**



\* Not applicable for Cervix Rotterdam applicator. The ovoid and ring sizes as provided in the descriptions in the guide are the measurements of the inner diameter (source path). The outer diameters vary for both rings and ovoids. For the correct outer diameter size, refer to the appropriate applicator user manual.



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### Advanced Gynecological Applicator-Venezia™

### Reach cervix, parametrium and vagina—expanding clinical capabilities

Venezia allows you to reach beyond: access tumors in the parametrium and the vagina with ease. The Advanced Gynecological Applicator allows treatment of patients with IIIB cervical cancer, but also IB, IIA/B, IIIA and stage IVA tumors. One applicator can treat multiple tumor stages, so you can use the same applicator type for various patient groups. The two lunar-shaped ovoids form a ring when clicked together, allowing you to benefit from the advantages of a tandem and ovoid applicator in combination with the dose distribution of a ring—high dose to the target volume while sparing organs at risk.

### **Reproducible dosimetric results**

The numbered hole positions on the Venezia ovoids and template facilitate consistent needle placement for every fraction—every time. Additionally, the insertion tool helps to insert the needles at the exact prescribed depth.

Venezia is included in the Oncentra® Brachy Applicator Modeling module, making reconstruction easy and fast. Simply select Venezia, then import and modify to meet clinical needs. Manual reconstruction becomes obsolete, saving time and streamlining workflow.

### Simplify (interstitial) gynecological brachytherapy

Interstitial brachytherapy for advanced stage cervical cancer can be performed by free-hand needle placement. Although Venezia still allows free-hand needle placement, it is not necessary because the parallel and oblique needle holes in the ovoids and perineal template guide the needles to the desired location. In addition, the needle insertion tool enables the physician to advance the ovoid needles to the prescribed depth. This guided needle placement ensures reproducible dosimetric results, making needle placement easier and more accurate.

Venezia is much easier to insert and assemble than conventional gynecological applicators. Simply insert the first half of the applicator and attach the second half by sliding and clicking the two parts together. The applicator contains no screws and requires no tools, making applicator assembly and insertion an easy do-it-yourself task.

### Easily integrate into the workflow

Venezia comes in various sizes to accommodate every patient's pelvic anatomy, for increased patient comfort. And, depending on the patient's indication, the physician can select vaginal and/or perineal needle insertion. The multipurpose applicator eliminates the need for a separate device for every indication.

Venezia suits all imaging modalities including ultrasound, CT, x-ray and MRI. For virtually any imaging workflow, Venezia will always be clearly visible in the image dataset.

### Intended use:

- · Cervix
- · Endometrium

#### Note:

User manual 777.00493-06

Advanced Gynecological Applicator Venezia

Part number	Description
126001	Interstitial lunar ovoid tube 22 mm 60° right
126002	Interstitial lunar ovoid tube 22 mm 60° left
126003	Interstitial lunar ovoid tube 26 mm 60° right
126004	Interstitial lunar ovoid tube 26 mm 60° left
126005	Interstitial lunar ovoid tube 30 mm 60° right
126006	Interstitial lunar ovoid tube 30 mm 60° left
126007	Vaginal cap 22 mm right
126008	Vaginal cap 22 mm left
126009	Vaginal cap 26 mm right
126010	Vaginal cap 26 mm left
126011	Vaginal cap 30 mm right
126012	Vaginal cap 30 mm left
126013	Intrauterine tube 0 mm
126014	Intrauterine tube 30 mm 30°
126015	Intrauterine tube 40 mm 30°
126016	Intrauterine tube 50 mm 30°
126017	Intrauterine tube 60 mm 30°
126018	Intrauterine tube 70 mm 30°
126019	Intrauterine tube 30 mm 15°
126020	Intrauterine tube 40 mm 15°
126021	Intrauterine tube 50 mm 15°
126022	Intrauterine tube 60 mm 15°
126023	Intrauterine tube 70 mm 15°
126200	Fixation element <sup>1</sup>
126201	Fixation clip'
126202	Perineal template dorsal 0° 1
126203	Perineal template dorsal 12° <sup>1</sup>
126204	Perineal template ventral 0° 1
126205	Perineal bar <sup>1</sup>
126206	Interstitial lever

### **Optional items**

Part number	Description
129001 •	Guiding Tubes Interstitial (Lunar) Ovoid (5x1)
129002 •	Guiding Tubes Vaginal Cap/interstitial Tube (5x1)
129003 ●	Bracelet (5 pcs)
129004 ●	Number Tag (4 pcs x 5 pouches)
101012	Sterilizing caps CT/MR (50 pcs)
110268	ProGuide obturator bulk set, 6F x 294 mm (1 x 5)
189714	Insertion tool
189566* •	Smit sleeves CT/MR (set of 10, l = 40 mm, d = 9 mm)
189040	Cleaning brush Ø 2.5 mm x 250 mm (set of 3)
189043	Cleaning brush Ø 6.5 mm x 100 mm (set of 3)
137287	Lock inserts set for 6F plastic needles (20 pcs)
137290	Needle lock tool
101015	CT/MR sterilization box
various** •	ProGuide needles 6F

### Why the Advanced Gynecological Applicator Venezia?

- Reach cervix, parametrium and vagina, expanding clinical capabilities
- Ensure reproducible dosimetric results
- Simplify (interstitial) gynecological brachytherapy
- · Easily integrate into workflow

"With Venezia, I expect to treat advanced cervical cancer patients with more ease. Venezia will allow me to reach tumors extended to the parametrium because I can position needles at multiple angles, in the vagina and through the perineum."

#### Petch Alisanant, MD

Division of Radiation Oncology Chulalongkorn University Bangkok, Thailand

<sup>1</sup> New part number. For previous part numbers, refer to the Legacy products section, page 90

- \*For more options, refer to Optional items section, page 108
- \*\*See section Needles and Flexible Implant Tubes, page 82

Consumables information Single use, delivered sterile



### Geneva<sup>™</sup>-Universal Gynecological Applicator

Easy to assemble and easy to insert, Geneva accommodates most female pelvic anatomies and is suitable for treating the majority of cervical cancer cases up to stage IIB.

Being MR compatible and having the option for guided interstitial brachytherapy with every configuration, Geneva provides unprecedented versatility without compromising ease of use and precision.

### Adaptable for a diverse patient population

- · Accommodates most female pelvic anatomies
- · Provides interstitial option for post-hysterectomy cases
- · Standardizes treatment for all cases up to stage IIB

Suitable for all cervical cancer patients up to stage IIB, Geneva is the universal gynecological applicator for every gynecological brachytherapy center.

With its modular design, Geneva can be configured to suit every female pelvic anatomy.

#### Interstitial option always available

Geneva ensures that the option for guided interstitial brachytherapy is always available, even with the smallest ovoids, for optimal target coverage.

The unique interstitial tube (I-tube) also enables clinicians to reach cancerous tissue around the vaginal cuff following hysterectomy. With ProGuide needles and guiding tube, the I-tube enhances accurate and reproducible dose distributions in hysterectomy patients and eliminates the need for free-hand needle placement.

### Precise treatment planning and accurate dose delivery

- · Supports all image-guided brachytherapy options, including IGABT
- Fixed geometry ensures rapid and accurate applicator modeling
- · Allows easy applicator mapping every time

Geneva is completely MR compatible, offering distortionfree image guidance using all 2D and 3D imaging options. In addition, interstitial capability with every configuration supports the need for image guided adaptive brachytherapy (IGABT).

### Click, ready

Geneva is quick and easy to assemble without the need for small screws or additional tools. Using the unique Elekta Clicking System, the applicator is ready for use in just four clicks, ensuring a faster workflow.

The modular design is completely adaptable to suit the users' needs and the innovative spreading clip allows flexibility for a wider reach, if required. The applicator clamp can be used to immobilize and stabilize the applicator once assembled.

#### Intended use:

- · Cervix
- Endometrium

#### Note:

User manual 777.00610

- · Geneva applicator is not yet CE registered in all countries.
- The registrations such as 510(k) and Health Canada will follow shortly.

Geneva<sup>™</sup>-Universal Gynecological Applicator

Part number	Description
152001	Ovoid Tube 1
152002	Ovoid Tube 2
152003	Ovoid Tube 1 - Interstitial Ovoid 13 mm
152004	Ovoid Tube 2 - Interstitial Ovoid 13 mm
152005	Intrauterine Tube 0 mm
152006	Interstitial Tube
152007	Intrauterine Tube 30 mm 15°
152008	Intrauterine Tube 40 mm 15°
152009	Intrauterine Tube 50 mm 15°
152010	Intrauterine Tube 60 mm 15°
152011	Intrauterine Tube 70 mm 15°
152012	Intrauterine Tube 80 mm 15°
152013	Intrauterine Tube 30 mm 30°
152014	Intrauterine Tube 40 mm 30°
152015	Intrauterine Tube 50 mm 30°
152016	Intrauterine Tube 60 mm 30°
152017	Intrauterine Tube 70 mm 30°
152018	Intrauterine Tube 80 mm 30°
152019	Intrauterine Tube 30 mm 45°
152020	Intrauterine Tube 40 mm 45°
152021	Intrauterine Tube 50 mm 45°
152022	Intrauterine Tube 60 mm 45°
152023	Intrauterine Tube 70 mm 45°
152024	Intrauterine Tube 80 mm 45°
152025	Interstitial Ovoid Pair 15 mm
152026	Interstitial Ovoid Pair 20 mm
152027	Interstitial Ovoid Pair 25 mm
152028	Interstitial Ovoid Pair 30 mm
152029	Interstitial Ovoid Pair 35 mm
152030	Interstitial Ovoid Pair 40 mm
152037	Rectal Retractor 20 mm
152038	Rectal Retractor 30 mm
152039	Rectal Retractor 40 mm
152040	Spreading Clip
152032	Tubes locking clip



### Why Geneva?

- Adaptable for a diverse patient population
- Interstitial option always available
- Precise treatment planning and accurate dose delivery
- Click, ready quick and easy to assemble

"Geneva achieves the treatment capabilities of an Utrecht applicator and is much more easy to insert, without any small parts. The variability in applicator size makes it suitable for many different patient anatomies, where the option of interstitial is always available."

### Guanghui Cheng, MD, PhD

Head of Department of Radiation Oncology, China-Japan Union Hospital of Jilin University, Changchun, China

### **Optional items**

Part number	Description
129001 •	Guiding Tubes Interstitial (Lunar) Ovoid (5x1)
129002 •	Guiding Tubes Vaginal Cap/interstitial Tube (5x1)
129003 ●	Bracelet (5 pcs)
129004 ●	Number Tag (4 pcs x 5 pouches)
101012	Sterilizing caps CT/MR (50 pcs)
110268	ProGuide obturator bulk set, 6F x 294 mm (1 x 5)
189714	Insertion tool
189566* •	Smit sleeves CT/MR (set of 10, I = 40 mm, d = 9 mm)
189040	Cleaning brush Ø 2.5 mm x 250 mm (set of 3)
189043	Cleaning brush Ø 6.5 mm x 100 mm (set of 3)
101015	CT/MR sterilization box

\*For more options, refer to Optional items section, page 108

Consumables information Single use, delivered sterile

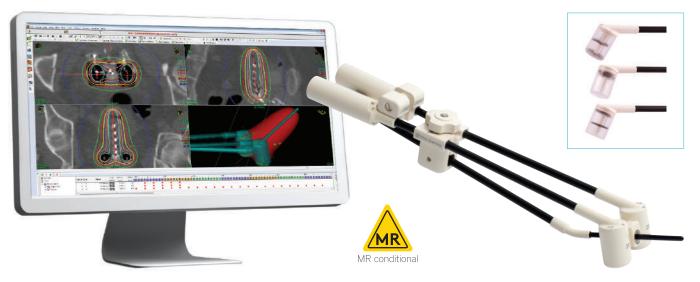


Image shows the applicator with the 4 mm intrauterine tube

### Fletcher CT/MR Shielded Applicator

### Combining the benefits of 3D imaging with ovoid shielding

During recent years, 3D image-guided brachytherapy using CT and MR imaging has steadily replaced x-raybased dose planning. Visualization of the targeted area and untargeted anatomies enables conformation of the dose distribution to the target volume and dose reduction to organs at risk. Sparing of the organs at risk was traditionally accomplished by the use of shielded ovoids. However, the metal components of such ovoids interfere with modern 3D-imaging modalities and distort acquired images.

The Fletcher CT/MR shielded applicator is the first of its kind to overcome these issues. Moveable shielding incorporated in the ovoids allows you to lower the dose to organs at risk during gynecological brachytherapy treatments. Highquality CT and MR images for 3D dose planning can now be combined with protection of the organs at risk.

### Intended for:

- · Cervix
- Endometrium

### Note:

- · Includes unique moveable shielding mechanism
- · MR conditional (up to 3 Tesla)
- This applicator can be sterilized using plasma sterilization (STERRAD<sup>®</sup>)
- · User manual 777.00157
- The most accurate dose effect of the shields in your plans can be calculated with ACE (TG-186) in Oncentra Brachy, for Iridium-192 source. Oncentra also provides a shield approximation that can be used for TG-43 calculations for Iridium-192.

### **Order information**

```
Fletcher CT/MR shielded applicator set (4 mm)
Part # 110980
```

Part number	Description
110930	Shielded ovoid tube 1
110940	Shielded ovoid tube 2
110970	Intrauterine tube (4 mm), 15°
110971	Intrauterine tube (4 mm), 30°
189722	Adjustable fixation mechanism
110957	Fixation clip
110967	Cervical stopper (4 mm)
101012	Sterilization caps (IU tube) (50 pcs)
110960	Ovoid cap 25 mm (2 pcs)
110961	Ovoid cap 30 mm (2 pcs)

110963	Transfer tube cap (2 pcs)
110283	Screwdriver titanium
189930	Fixation nuts (spare; 5 pcs)
189894	Plastic screw M5 PPSU (10 pcs)

### Fletcher CT/MR shielded applicator set (6 mm) Part # 110950

Part number	Description
110930	Shielded ovoid tube 1
110940	Shielded ovoid tube 2
189739	Intrauterine tube (6 mm), 15°
189745	Intrauterine tube (6 mm), 30°
189722	Adjustable fixation mechanism
110957	Fixation clip
110954	Cervical stopper (6 mm)
101012	Sterilization caps (IU tube) (50 pcs)
110960	Ovoid cap 25 mm (2 pcs)
110961	Ovoid cap 30 mm (2 pcs)
110963	Transfer tube cap (2 pcs)
110283	Screwdriver titanium
189930	Fixation nuts (spare 5 pcs)
189894	Plastic screw M5 PPSU (10 pcs)

### **Optional items**

Part number	Description
110972	Intrauterine tube (4 mm), 45°
189769	Intrauterine tube (6 mm), 45°
189566* ●	Smit Sleeve CT/MR 40 mm (10 pcs)
189676* ●	189676 and following Smit Sleeves, I = 20 mm and longer, d = 6 mm (10 pcs)
101031	Fixation mechanism for ovoid tubes
101015	CT/MR sterilization box
189931	CT/MR applicator clamp with axle
189932	CT/MR applicator clamp with base plate
110700	Pins for adjustable fixation mechanism (5 pcs)
189724	Internal fixation mechanism
189930	Fixations nuts (spare 5 pcs)
189894	Plastic screws M5 PPSU (10 pcs)
189729	Fixation axle

#### Consumables information

Single use, delivered sterile

Single use, delivered non-sterile

\*For more options, refer to the Optional items section

# Why the Fletcher CT/MR shielded applicator?

- High dose to target combined with significant protection of organs at risk
- Minimize image artifacts with moveable shields
- Maximum workflow efficiency with Oncentra Brachy planning tools



### **Fletcher Williamson Applicator**

This applicator is based on the dosimetry of the conventional shielded Fletcher-style applicator. A lightweight tungsten alloy shielding is incorporated in the ovoid tubes to reduce the dose to the bladder and rectum. Ovoids are positioned at a 60° angle to the vaginal axis. The set includes mini ovoids for narrow vaginas and thin 3.2 mm intrauterine tubes.

A specific Fletcher Williamson 'Asia Pacific' applicator set is available, which is unshielded and has small geometry ovoids.

### Intended for:

- · Cervix
- $\cdot$  Endometrium

### Note:

- $\cdot$  The applicator can be sterilized using steam sterilization
- · User manual 090.604

### Order information

Fletcher Williamson applicator set, part # 085230

Part number	Description
085233	Ovoid tube 1
085234	Ovoid tube 2
085231	Shielded ovoid tube 1
085232	Shielded ovoid tube 2
084203	Ovoid pair, mini, 16 mm unshielded
085235	Ovoid cap pair, 20 mm, small
085236	Ovoid cap pair, 25 mm, medium
085237	Ovoid cap pair, 30 mm, large
084028	Fixing mechanism, ovoid tube
084024	Intrauterine tube 15°
084025	Intrauterine tube 30°
084026	Intrauterine tube 45°
084030	Cervical stopper, small
084027	Adjustable fixing mechanism
084158	Sterilizing caps, 3.2 mm (50 pcs)
006182	Screwdriver

### Fletcher Williamson Asia Pacific set, part # 085260

Part number	Description
085233	Ovoid tube 1
085234	Ovoid tube 2
084203	Ovoid pair, mini, 16 mm unshielded
084041	Ovoid pair, half, unshielded
084042	Ovoid pair, 20 mm, small, unshielded
084028	Fixing mechanism, ovoid tube
084024	Intrauterine tube 15°
084025	Intrauterine tube 30°
084026	Intrauterine tube 45°
084030	Cervical stopper, small
084027	Adjustable fixing mechanism
084158	Sterilizing caps, 3.2 mm
006182	Screwdriver

### **Optional items**

Part number	Description
084043	Ovoid pair, 25 mm, medium, unshielded
084044	Ovoid pair, 30 mm, large, unshielded
084421	Rectal retractor, 4 x 30 mm (thickness x width)
084422	Rectal retractor, 4 x 40 mm (thickness x width)
086010	Rectal retractor, 10 x 40 mm (thickness x width)
086009	Rectal retractor, 10 x 30 mm (thickness x width)
086011	Fixing mechanism, retractor
006025	Spare fixing screw (M5 x 5.5m SS/PPSU)
006030	Torque screwdriver, 2.5 mm
101015	CT/MR sterilization box
189676 and following* ●	Smit Sleeves CT/MR for Ti intrauterine tube, I = 20 mm and longer, d = 6 mm (box of 10 pcs)

Consumables information Single use, delivered sterile Single use, delivered non-sterile

\*For more options, refer to the Optional items section, page 108

### Why the Fletcher Williamson applicator?

• Embedded shielding reduces dose to critical organs

"The Fletcher Williamson applicator is a well-crafted, precision instrument with bladder and rectal shielding. This instrument allows us to continue a quality technical approach to gynecological brachytherapy with High Dose Rate brachytherapy."

### J. Stitt, MD

University of Wisconsin, Madison United States A Los and a los



### **Ring CT/MR Applicator**

### The optimal solution for volume-based intracavitary cervical brachytherapy

The ring CT/MR applicator uses the ring to create a pear-shaped dose to match the anatomy of the cervix and endometrium.

The applicator uses strong fiber composite tubing and can be used in combination with CT and MR imaging for volume-based treatment planning. The fixed geometry of the ring and the intrauterine tube provide a reproducible applicator geometry. With the use of the Applicator Modeling module in Oncentra Brachy, reconstruction of the applicator takes only a few mouse clicks.

### Intended for:

- · Cervix
- · Endometrium

### Note:

- This applicator can be sterilized using steam sterilization and ethylene oxide
- · User manual 090.617

### Order information

Ring CT/MR applicator set (4 mm)

Part number	Description
110669	Ring CT/MR applicator set complete, 4 mm
110670	Ring CT/MR applicator set, 30°, 4 mm
110671	Ring CT/MR applicator set, 45°, 4 mm
110672	Ring CT/MR applicator set, 60°, 4 mm

#### Ring CT/MR applicator set, 6 mm, part # 101035

Part number	Description
101060	Ring applicator set, 30°, CT/MR
101061	Ring applicator set, 45°, CT/MR
101062	Ring applicator set, 60°, CT/MR
101038	Ring tube, d = 34 mm, 30°
101044	Ring tube, d = 34 mm, 45°
101050	Ring tube, d = 34 mm, 60°
101054	Perineal bar

#### Ring CT/MR applicator set, 6 mm, 30°, part # 101060

Part number	Description
101036	Ring tube, d = 26 mm, 30°
101037	Ring tube, d = 30 mm, 30°
101039	Intrauterine tube, I = 20 mm, 30°
101040	Intrauterine tube, I = 40 mm, 30°
101041	Intrauterine tube, I = 60 mm, 30°
101056	Rectal retractor, 30°
101012	Sterilizing caps CT/MR (pack of 50)

### Ring CT/MR applicator set, 6 mm, 45°, part # 101061

Part number	Description
101042	Ring tube, d = 26 mm, 45°
101043	Ring tube, d = 30 mm, 45°
101045	Intrauterine tube, I = 20 mm, 45°
101046	Intrauterine tube, I = 40 mm, 45°
101047	Intrauterine tube, I = 60 mm, 45°
101055	Rectal retractor, 45°
101012	Sterilizing caps CT/MR (pack of 50)

### Ring CT/MR applicator set, 6 mm, 60°, part # 101062

Part number	Description
101048	Ring tube, d = 26 mm, 60°
101049	Ring tube, d = 30 mm, 60°
101051	Intrauterine tube, I = 20 mm, 60°
101052	Intrauterine tube, I = 40 mm, 60°
101053	Intrauterine tube, I = 60 mm, 60°
101057	Rectal retractor, 60°
101012	Sterilizing caps CT/MR (pack of 50)

### Optional items

Part number	Description	
189566* •	Smit Sleeve CT/MR (I = 40 mm, d = 9 mm)	
101054	Perineal bar (for part # 101060/061/062)	
101038	Ring tube, d = 34 mm, 30° (for part # 101060)	
101044	Ring tube, d = 34 mm, 45° (for part # 101061)	
101050	Ring tube, d = 34 mm, 60° (for part # 101062)	
110303/304/ 305/306/307	Intrauterine tube, d =4 mm, I = 40 30°/45°/60°	
101015	CT/MR sterilization box	
110290	MR line marker set	

#### Consumables information

Single use, delivered sterile

\*For more options, refer to the Optional items section, page 108

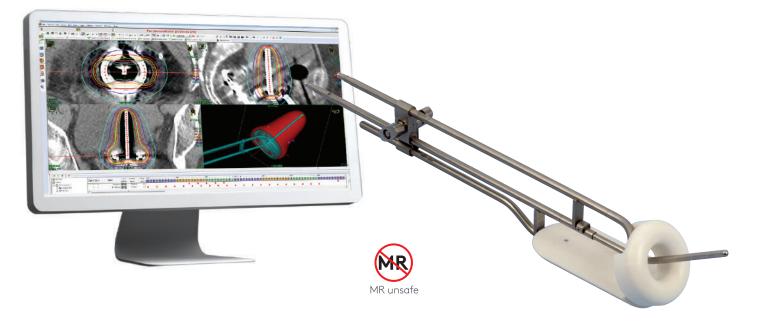
# Why the ring CT/MR applicator?

- Ideal for volume-based intracavitary cervical brachytherapy
- · Reproducible geometry
- $\cdot$  Compatible with CT, and MR safe

"We use the ring applicator to match the dosimetry of the Stockholm box."

### T.H. Knocke, MD

Universitätsklinik für Strahlentherapie, Wien Austria



### **Ring Applicator**

The ring applicator uses the ring to create a pear-shaped dose. This proven dosimetry shape matches the anatomy of the cervix and endometrium. A rectal retractor can be used to push the rectal/vaginal wall to a fixed distance from the source.

### Intended for:

- · Cervix
- · Endometrium

### Note:

- The applicator can be sterilized using steam sterilization and ethylene oxide
- · User manual 090.610

### Order information

Complete ring applicator set, part # 084050

Part number	Description	
085095	Ring tube, 30° (for set # 085095)	
085096	Ring tube, 45° (for set # 085096)	
085097	Ring tube, 60° (for set # 085097)	
084072	Perineal bar	
084056	Ring tube, d = 34 mm, 30°	
084055	Ring tube, d = 34 mm, 45°	
084054	Ring tube, d = 34 mm, 60°	
084051	Ring cap, d = 34 mm	

### Ring applicator set 30°, part # 085095

Part number	Description	
084062	Ring tube, d = 26 mm, 30°	
084059	Ring tube, d = 30 mm, 30°	
084065	Intrauterine tube, I = 20 mm, 30°	
084064	Intrauterine tube, I = 40 mm, 30°	
084063	Intrauterine tube, I = 60 mm, 30°	
084316	Rectal retractor, 30°	
084053	Ring cap, d = 26 mm	
084052	Ring cap, d = 30 mm	
084158	Sterilizing caps, 3.2 mm (50 pcs)	

### Ring applicator set 45°, part # 085096

Part number	Description	
084061	Ring tube, d = 26 mm, 45°	
084058	Ring tube, d = 30 mm, 45°	
084068	Intrauterine tube, I = 20 mm, 45°	
084067	Intrauterine tube, I = 40 mm, 45°	
084066	Intrauterine tube, I = 60 mm, 45°	
084335	Rectal retractor, 45°	
084053	Ring cap, d = 26 mm	
084052	Ring cap, d = 30 mm	
084158	Sterilizing caps, 3.2 mm (50 pcs)	

### Ring applicator set 60°, part # 085097

Part number	Description	
084060	Ring tube, d = 26 mm, 60°	
084057	Ring tube, d = 30 mm, 60°	
084071	Intrauterine tube, l = 20 mm, 60°	
084070	Intrauterine tube, I = 40 mm, 60°	
084069	Intrauterine tube, I = 60 mm, 60°	
084319	Rectal retractor, 60°	
084053	Ring cap, d = 26 mm	
084052	Ring cap, d = 30 mm	
084158	Sterilizing caps, 3.2 mm (50 pcs)	

### Optional items

Part number	Description	
084051	Ring cap, d = 34 mm	
084056	Ring tube, d = 34 mm, 30° (requires part # 085095)	
084055	Ring tube, d = 34 mm, 45° (requires part # 085096)	
084054	Ring tube, d = 34 mm, 60° (requires part # 085097)	
084072	Perineal bar (already included in part # 084050)	
084078	Intrauterine tube, I = 20 mm, 90°	
084077	Intrauterine tube, I = 40 mm, 90°	
084076	Intrauterine tube, I = 60 mm, 90°	
084338	Rectal retractor, 90°	
101015	CT/MR sterilization box	
189676 and following* ●	Smit Sleeves CT/MR for 4 mm intrauterine tube, I = 20 mm and longer, d = 6 mm (box of 10)	

Consumables information

Single use, delivered sterile

\*For more options, refer to the Optional items section, page 108

### Why the ring applicator?

· Reproducible applicator geometry

/////

· Straightforward insertion and planning

Applicator catheters following the curve of the tip to reach close to the vaginal vault

MR

MR safe

### Vaginal CT/MR Multi Channel Applicator

.....

### The precise dose delivery solution for vaginal brachytherapy

Bringing the right dose to the right place is critical in successful vaginal brachytherapy. The vaginal CT/MR multi channel applicator has been specifically designed for gynecologic brachytherapy to provide accurate target coverage and maximum conformity for gynecologic malignancies.

### Reach where it matters most

The vaginal CT/MR multi channel applicator features a unique design incorporating channels that follow the curve of the applicator tip. This brings the dosimetry measurably closer to the vaginal vault, allowing you to reliably and more effectively cover the planning target volume.

#### Unique treatment precision

The channels, located immediately underneath the surface of the applicator, provide high accuracy and optimized treatment precision, while tailoring the dose to the target and saving surrounding organs at risk such as the bowel and bladder.

### **Practical design**

The applicator is easy to assemble, clean and sterilize. It seamlessly integrates with Oncentra Brachy, which significantly improves the speed of planning and ensures precise and reproducible placement of the applicator. For quick and accurate treatment planning based on MRI, the applicator's geometry is incorporated in the Applicator Modeling functionality of Oncentra Brachy. The compatibility with Oncentra Brachy offers a unique solution for vaginal brachytherapy, combining precision with speed.

#### Intended for:

- · Vagina
- · Cervix
- · Endometrium

- The center of the surface channels is located 5 mm underneath the cylinder surface
- $\cdot$  The applicator can be sterilized using steam sterilization
- · User manual for applicator 777.00171
- · User manual for catheters 777.00172

Vaginal CT/MR multi channel applicator set, part # 110750

Part number	Description
101002	Intravaginal tube
110752	Set of cylinder components, Ø 25 mm (features 6 surface channels)
110756	Set of cylinder components, Ø 30 mm (features 8 surface channels)
110761	Set of cylinder components, Ø 35 mm (features 8 surface channels)
101012	Sterilizing caps CT/MR (pack of 50)

### **Optional items**

Part number	Description	
110800* ●	Catheter set with collar 6F x 293 mm (delivered sterile and for single use only)	
110766	Set of cylinder components, Ø 40 mm (features 10 surface channels)	
101003	Intrauterine tube 15°, I = 40 mm, Ø 6 mm	
101004	Intrauterine tube 30°, I = 60 mm, Ø 6 mm	
101005	Intrauterine tube 45°, I = 80 mm, Ø 6 mm	
110787**	CT expansion set, featuring thin titanium intrauterine tubes I = 40, 60 and 80 mm	
110773	Perineal bar set	
110774	Perineal bar ventral	
110776	Perineal bar dorsal	
110779	Perineal bar lever	
110771	Set of fixations screws (5 pcs)	
110778	Applicator clamp adapter set	
101015	CT/MR sterilization box	
101069	IU3 x-ray marker for central tandem for microSelectron	
110404	IU3 x-ray marker for central tandem for Flexitron	

### Consumables information

Single use, delivered sterile

\*Required for use

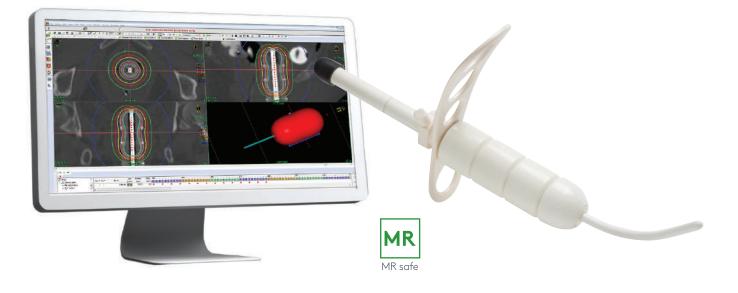
 $\ast\ast$  When using titanium intrauterine tubes the applicator is MR unsafe

## Why the vaginal CT/MR multi channel applicator?

- $\cdot$  Reach where it matters most
- Unique treatment precision
- · Practical design
- · MR safe; artifact-free images

"The vaginal CT/MR multi channel applicator allows me to get the exact target coverage I planned and gives me confidence in conformity in the treatment of my gynecologic cancer patients." **B.R. Pieters, MD, PhD** 

Head of Brachytherapy Department Academic Medical Centre (AMC), Amsterdam The Netherlands



### Vaginal CT/MR Applicator

The vaginal CT/MR applicator is designed for treatment of the vaginal cuff. This easy-to-use applicator is available in different cylinder diameters to reduce the surface dose. By varying the number of segments of the cylinder, the length of the cylinder can be adapted to clinical needs. The non-metallic materials of the applicator support its use in combination with CT and MR imaging modalities.

### Intended for:

- · Vagina
- · Cervix
- · Endometrium
- · Rectum

- The most accurate dose effect of the shields in your plans can be calculated with Oncentra Brachy ACE (TG-186) for both Iridium-192 and Cobalt-60 sources. Oncentra Brachy also provides a shield approximation that can be used for TG-43 calculations for Iridium-192
- $\cdot$  This applicator can be sterilized using steam sterilization
- · User manual 090.612

Complete set, part # 101001

Part number	Description	
101002	Intravaginal tube	
101003	Intrauterine tube 15°, I = 40 mm, Ø 6 mm	
101004	Intrauterine tube 30°, I = 60 mm, Ø 6 mm	
101005	Intrauterine tube 45°, I = 80 mm, Ø 6 mm	
101007	Set of 4 cylinders, 20 mm	
101008	Set of 4 cylinders, 25 mm	
101009	Set of 4 cylinders, 30 mm	
101010	Set of 4 cylinders, 35 mm	
101006	Cylinder fixation	
101013	Perineal bar	
101012	Sterilizing caps CT/MR (pack of 50)	

### Optional items

Part number	Description	
101011	Set of 4 cylinders, 40 mm	
189566* ●	Smit Sleeve CT/MR (I = 40 mm, d = 9 mm)	
101015	CT/MR sterilization box	
101149	Knob PPSU (minimum order quantity is 5 pcs)	

Consumables information

Single use, delivered sterile

\*For more options, refer to the Optional items section, page 108

# Why the vaginal CT/MR applicator?

- · Reproducible dosimetry
- · Easily adaptable to patient anatomy
- $\cdot$  CT and MR compatible

### Gynecology



### **Vaginal Cylinder Applicator Titanium**

The vaginal cylinder applicator titanium (Ti) is an easy solution for intracavitary vaginal treatments. When used with an intrauterine tube, the applicator also offers a simple solution for treatment of the cervix, rectum or endometrium. The embedded titanium markers in the cylinder segments support visualization of the inserted applicator while minimizing contamination risk. The set is available in a range of different diameters and curvatures of the intrauterine tube to provide individually optimized treatment options and dose distribution.

### Intended for:

- · Vagina
- · Cervix
- · Endometrium
- · Rectum

- · Compatible with CT and MR (1.5T and 3T)
- $\cdot$  The applicator can be sterilized using steam sterilization
- · User manual 777.00282

Vaginal cylinder applicator set Ti, part # 137400

Part number	Description	
137194	Cylinder set, d = 20 mm	
137195	Cylinder set, d = 25 mm	
137196	Cylinder set, d = 30 mm	
137416	Intra-vaginal applicator tube (Ti)	
137402	Intra-vaginal/intrauterine tube, 40 mm (Ti)	
137403	Intra-vaginal/intrauterine tube, 60 mm (Ti)	
137404	Intra-vaginal/intrauterine tube, 80 mm (Ti)	
137401	Perineal bar 1	
137415	Spring lock tube (Ti)	
137570	Closing caps (25 pcs)	

### **Optional items**

Part number	Description
101149	Knob PPSU
137197	Cylinder set, d = 15 mm
137198	Cylinder set, d = 35 mm
137199	Cylinder set, d = 40 mm
101015	CT/MR sterilization box
189677/679/682* ●	Smit Sleeve

Consumables information Single use, delivered sterile

\*For more options, refer to the Optional items section, page 108

# Why the vaginal cylinder applicator titanium?

- Embedded markers for easy identification on images
- · Strong and lightweight
- $\cdot$  Compatible with CT and MR



### **Adjustable Cervix Applicator**

The adjustable cervix applicator for intracavitary treatment is very user-friendly. The cylinders are available in different diameters to adapt to patient anatomy, optimize dose distribution and reduce the mucosal dose. The intrauterine tube is available in three curvatures with different lengths. Conjointly, this gives a versatile applicator for cervical, uterine, vaginal and rectal cancer treatment.

### Intended for:

- · Cervix
- · Endometrium
- · Vagina
- · Rectum

- · User manual 090.611
- · Sterilization Advice Chart: 094.331

Adjustable cervix applicator set, part # 084450

Part number	Description
084455	Intrauterine tube, straight
084456	Intrauterine tube, angle 15°
084457	Intrauterine tube, angle 30°
084451	Cylinder, d = 20 mm, with marker
084452	Cylinder, d = 25 mm, with marker
084453	Cylinder, d = 30 mm, with marker
084454	Cylinder, d = 35 mm, with marker
084158	Sterilizing caps, 3.2 mm (pack of 50)
101015	CT/MR sterilization box

# Why the adjustable cervix applicator?

- $\cdot$  User-friendly applicator
- Designed for treatment of the cervix, endometrium, vagina and rectum



### **Shielded Cylindrical Applicator**

The shielded cylindrical applicator is designed for intracavitary treatments in which partial shielding is required to reduce the dose to critical organs. The shielding positions can be defined by the user through the use of tungsten alloy segments with different shielding angles. Markers indicate the position of the shielding. The effect of the shielding components can be modeled in Oncentra Brachy treatment planning software.

### Intended for:

- · Vagina
- $\cdot$  Rectum

- $\cdot$  This applicator can be sterilized using steam sterilization
- The most accurate dose effect of the shields in your plans can be calculated with Oncentra Brachy ACE (TG-186) for both Iridium-192 and Cobalt-60 sources. Oncentra Brachy also provides a shield approximation that can be used for TG-43 calculations for Iridium-192
- · User manual 090.609

Shielded cylindrical applicator set, part # 084320

Quantity	Part number	Description
1	084321	Central tube
1	084329	Tungsten shielding, 180°
2	084328	Tungsten shielding, 90°
1	084322	Cylinder, d = 25 mm
1	084323	Cylinder, d = 30 mm
1	084324	Cylinder, d = 35 mm
1	084325	Cylinder, d = 40 mm
1	084327	Fixing nut
1	084158	Sterilizing caps, 3.2 mm (50 pcs)

### **Optional items**

Part number	Description
084348	Plastic filler, 90° geometry
084349	Plastic filler, 180° geometry
101015	CT/MR sterilization box

# Why the shielded cylindrical applicator?

- Shielded segments for partial dose reduction to organs at risk
- Integrated markers for reconstruction of shielding on images

### **Miami Vaginal Applicator**

The Miami vaginal applicator was developed in cooperation with the University of Miami. The applicator contains six lateral tubes, which are equally spaced around the surface of the cylinder for optimized treatment.

A central tube and different intrauterine tubes expand the possible treatment options. Three different curvatures of intrauterine tubes are included and adjust to the uterine length. The vaginal cylinder is 30 mm in diameter with cylinder sleeves of 35 mm and 40 mm. This enables versatility in the treatment of vaginal, cervical, uterine and rectal carcinomas.

### Intended for:

- · Vagina
- $\cdot \ Cervix$
- · Endometrium
- · Rectum

- The applicator can be sterilized using ethylene oxide or using steam sterilization (except for Awllen key screwdriver)
- · User manual 090.601

Miami vaginal applicator set, part # 085210

Part number	Description
085211	Central tube
084455	Intrauterine tube, straight
084456	Intrauterine tube, 15°
084457	Intrauterine tube, 30°
085212	Cylinder, d = 30 mm, with marker
085213	Cylinder sleeve, d = 35 mm
085214	Cylinder sleeve, d = 40 mm
085218	Cone insert
006182	Screwdriver
598027	Allen key screwdriver 3 mm
083147	Sterilizing caps, 1.9 mm (50 pcs)
084158	Sterilizing caps, 3.2 mm (50 pcs)

### **Optional items**

Part number	Description
101015	CT/MR sterilization box
189676 and following* ●	Smit Sleeves CT/MR for 4 mm intrauterine tube, I = 20 mm and longer, d = 6 mm (box of 10)

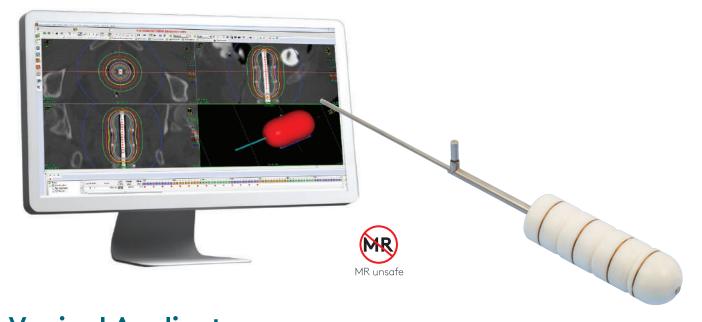
Consumables information

Single use, delivered sterile

\*For more options, refer to the Optional items section, page 108

### Why the Miami vaginal applicator?

• Multiple surface channels for dose optimization



### **Vaginal Applicator**

The Vaginal applicator for intracavitary treatment is very user-friendly. The set is available with three different lengths and curvatures of the intrauterine tube to provide additional treatment options. The cylinders are available in different diameters to optimize the dose distribution and reduce the mucosal dose.

The vaginal applicator can be used to treat vaginal cuff, cervix, rectum or endometrium when used with an intrauterine tube.

### Intended for:

- · Vagina
- $\cdot \ {\rm Cervix}$
- · Endometrium
- · Rectum

- The applicator can be sterilized using steam sterilization and ethylene oxide
- · User manual 090.606

Vaginal applicator set, part # 084350

Part number	Description
084002	Vaginal tube
084003	Intrauterine tube, I = 40 mm, 15°
084004	Intrauterine tube, I = 60 mm, 30°
084005	Intrauterine tube, I = 80 mm, 45°
084010	Cylinder locking pipe
084351	4 cylinder parts, d = 20 mm, with marker
084352	4 cylinder parts, d = 25 mm, with marker
084353	4 cylinder parts, d = 30 mm, with marker
084354	4 cylinder parts, d = 35 mm, with marker
084158	Sterilizing caps, 3.2 mm (50 pcs)

### **Optional items**

Part number	Description
084008	Perineal bar
084919	Fixing nut (for perineal bar)
084009	Cervical stopper
084355	4 cylinder parts, d = 40 mm with marker
101149	Knob PSU
189676 and following* ●	Smit Sleeves CT/MR for 4 mm intrauterine tube, I = 20 mm and longer, d = 6 mm (box of 10)
101015	CT/MR sterilization box

Consumables information Single use, delivered sterile

\*For more options, refer to the Optional items section, page 108

# Why the vaginal applicator?

- · Reproducible dosimetry
- Easily adaptable to patient geometry



### Vaginal Mold Applicator

The vaginal mold applicator was developed in close cooperation with Center Oscar Lambret in Lille, France. It enables the user to apply the French "moulage," or Institut Gustave Roussy technique for afterloading. The aim of this method is a personalized mold for irradiation with precise dose distribution and good patient tolerance. The set consists of three mechanically coded, stainless steel channel assemblies, which can be easily connected to the flexible vaginal mold tubes. These are embedded in the customized mold.

### Intended for:

- · Vagina
- · Cervix

- The vaginal mold channel assemblies are reusable, and can be sterilized using steam sterilization and ethylene oxide
- The vaginal mold tubes are for single use only, and can be sterilized using ethylene oxide before use
- · User manual 090.708

Vaginal mold applicator set, part # 189018

Part number	Description
189020	Vaginal mold channel 1 assembly
189021	Vaginal mold channel 2 assembly
189022	Vaginal mold channel 3 assembly
189019 •	Vaginal mold tubes set (30 pcs)
084158	Sterilizing caps (50 pcs)

### Consumables information

Single use, delivered sterile



- $\cdot$  Tailored irradiation
- · Precise dose distribution



### **Rotte Endometrial Applicator**

The Rotte endometrial applicator (or Rotte "Y" applicator) has been developed with Professor K. Rotte of the Universitäts-Frauenklinik, Würzburg, Germany, and is specifically designed for High Dose Rate treatment of the endometrium. The applicator is easy to insert, using two opposed intrauterine tubes. The intrauterine tubes can be locked into position with a single action. Once locked, the applicator has a fixed geometry, which provides excellent reproducibility of the dose distribution.

### Intended for:

· Endometrium

- $\cdot$  Excellent reproducibility of dose distribution
- · Straightforward workflow
- · Designed for reuse
- · User manual 090.620
- · Sterilization advice chart: 090.620

Basic Rotte applicator set, 32 mm, part # 084230

Part number	Description	
084231	Applicator tube 1, right uterus	
084232	Applicator tube 2, left uterus	
084158	Sterilizing caps, 3.2 mm (50 pcs)	

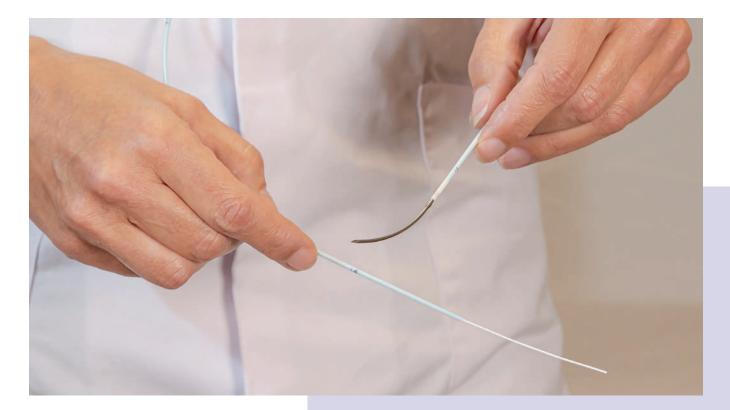
#### Complete set, part # 084434

Part number	Description	
084435	Basic Rotte applicator set, 20 mm	
084230	Basic Rotte applicator set, 32 mm	
084436	Basic Rotte applicator set, 40 mm	
084437	Basic Rotte applicator set, 50 mm	
084158	Sterilizing caps, 3.2 mm (50 pcs)	

# Why the Rotte endometrial applicator?

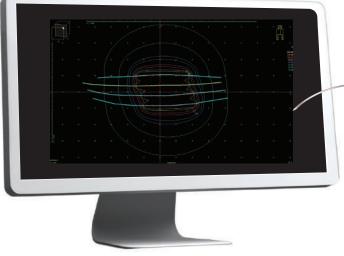
- Dedicated for use in the endometrium
- $\cdot$  Easy to insert
- · Excellent reproducibility

# Prostate, Rectum and Bladder



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# Luneray<sup>®</sup> Catheter

Brachytherapy is a well-known treatment for certain types of bladder cancer, with good clinical outcome. A key advantage of brachytherapy is the potential to spare the bladder, which improves the quality of life for the patient. A hurdle for the adoption of bladder brachytherapy, however, has been the invasiveness and complexity of the procedure.

Luneray overcomes this barrier by offering a unique system of an integrated catheter and needle, designed to enable laparoscopic, minimally invasive bladder brachytherapy procedures.

#### Unique catheter/needle system

Luneray combines a flexible catheter with a curved needle, which enables minimally invasive catheter placement.

#### Precise catheter placement

Luneray's state-of-the-art curved needle design allows for optimal maneuverability and precise catheter placement for accurately targeted bladder brachytherapy procedures. The catheter is made of exclusive material and compiled with fill-wire, offering unsurpassed kink resistance.

#### Enables organ-sparing, laparoscopic procedures

Luneray is designed to enable minimally invasive access to the bladder. Minimally invasive procedures are associated with quick recovery and fewer complications, supporting a patient-friendly treatment.

#### Intended for:

Interstitial brachytherapy of soft tissue that allows the insertion of this flexible applicator, for example:

- · Abdominal structures/organs (e.g. urinary bladder)
- $\cdot$  Head and neck (e.g. ear, lip, nose, tongue, oral mucosa)
- · Skin (e.g. keloids)
- Soft tissue sarcoma

- Each package holds five identical, pre-assembled needle/catheter products, single packed in a double pouch
- Radio-opaque buttons to fixate the catheter after insertion. Available in seven colors
- Imaging for treatment planning and verification by way of x-ray, CT and MR
- · Centimeter marks: every 5 cm (line and number)
- Detailed marking in the center of the catheter to assist accurate catheter placement: 1 cm increments between 20-22 cm and 28-30 cm
- · Manual number 777.00293
- \* The Luneray catheter is MR safe when the needle is removed as described in the user manual. • Luneray: MR unsafe
  - · Luneray Needle: MR unsafe
  - · Luneray Catheter: MR safe

#### **Technical specifications**

#### Luneray Catheter/Needle system

	Catheter	Needle
Main material	Polyamide PA6427	Stainless Steel AISI316
Magnetic Resonance Imaging (MR)	MR safe	MR unsafe
Usage	Single use	Single use
Sterility	Delivered sterile	Delivered sterile
Diameter	6F	6F
Length	50 cm	37, 47, 57 or 67 mm <sup>1</sup>
Curvature (radius)		30, 45, 60, 75 mm <sup>1</sup>

<sup>1</sup> the needles have a fixed length/radius combination, e.g. length 37 mm/radius 30 mm

#### Order information

#### Available Luneray configurations

	Part number	Description	
	110564 •	Luneray catheter, 6F, 50 cm, needle I = 37 mm, radius 30 mm (5 pcs)	
	110565 •	Luneray catheter, 6F, 50 cm, needle I = 47 mm, radius 45 mm (5 pcs)	
60 mm (5 pcs)		Luneray catheter, 6F, 50 cm, needle I = 57 mm, radius 60 mm (5 pcs)	
		Luneray catheter, 6F, 50 cm, needle I = 67 mm, radius 75 mm (5 pcs)	

#### **Optional items**

Part number	Description	
189367	Cutter for flexibles (1 pcs)	
189282 •	Radio-opaque button white, 6F (72 pcs)	
189284 •	Radio-opaque button black, 6F (72 pcs)	
189286 •	Radio-opaque button red, 6F (72 pcs)	
189288 •	Radio-opaque button blue, 6F (72 pcs)	
189290 •	Radio-opaque button green, 6F (72 pcs)	
189292 •	Radio-opaque button yellow, 6F (72 pcs)	
189294 •	Radio-opaque button brown, 6F (72 pcs)	

#### Consumables information

Single use, delivered sterile

#### Why the Luneray catheter?

- Unique catheter/needle system enables minimally invasive catheter placement
- State-of-the-art needle design for optimal maneuverability and precise placement
- Enables organ-sparing laparoscopic procedures, supporting a patient-friendly treatment and quick recovery

"The Luneray catheter creates new opportunities to treat select bladder cancers in a minimally invasive way."

**G. Smits, MD, PhD** Urologist Rijnstate Hospital, Arnhem The Netherlands

#### E. van der Steen–Banasik, MD

Radiation Oncologist Arnhem Radiotherapy Institute The Netherlands

#### Prostate, Rectum and Bladder





Martinez with RTP and AccuSeed template holder

### **Martinez Prostate Template**

The Martinez brachytherapy prostate template has been designed to assist in enhancing precision. The ultra-light template locks to the stepper or stabilizer during insertion and guides needles under ultrasound imaging. The needles can be individually repositioned and locked for treatment. The individual locking insert ensures that the position of each needle will remain unchanged when adjusting another needle.

# Part of the real-time prostate brachytherapy solution

Elekta's real-time prostate brachytherapy solutions were developed with one goal in mind: to offer a real-time workflow for HDR and LDR prostate brachytherapy in which the treatment is, or can be, provided in a single session. The integration of all components in one prostate brachytherapy solution ensures that products interact seamlessly. With a design leading to highly conformal and uniform prostate brachytherapy treatment plans, users can be sure that clinical objectives are met in the most efficient and dedicated way.

#### Intended for:

· Assisting interstitial brachytherapy of the prostate gland

- $\cdot$  The template can be sterilized using steam sterilization
- User manual 777.00117
- \*Non-clinical testing demonstrated that the Martinez prostate template is MR conditional. A patient can be scanned safely, immediately after placement under the following conditions:
- · Static magnetic field of 1.5 Tesla or 3 Tesla
- · Maximum spatial gradient magnetic field of 720 gauss/cm
- Maximum MR system reported, whole body averaged specific absorption rate (SAR) of 2 W/kg for 15 minutes of scanning (i.e. per pulse sequence)

Martinez prostate template set, part # 137280

Part number	Description	
137281	Martinez prostate template	
137290	Needle lock tool	
137285	Template fixation pin set	

#### **Optional items**

Part number	Description	
137286 •	Lock inserts set for 5F plastic needles (20 pcs)	
137287 • Lock inserts set for 6F plastic needles (20 pcs)		
137289 •	Lock inserts set for 1.5 mm metal needles (20 pcs)	
137290	Needle lock tool	
137282 Template holder for RTP stepper		
137283	Template holder for Accuseed stepper	
137284	Template holder for D & K & Civco classic Accucare stepper	
137949	Template holder for OncoSelect stepper Material aluminum/stainless steel	
various** •	ProGuide needles 5F	
various** •	ProGuide needles 6F	
various**	Ø1,5 mm needles	

# Why the Martinez prostate template?

- · Small, ultra-light template
- Individual needle locks for various needle sizes
- · Quick implant removal
- Can be used with a stepper or free-hand technique

#### Consumables information Single use, delivered sterile

Single use, delivered non-sterile

\*\*See section Needles and Flexible Implant Tubes, page 82

#### Prostate, Rectum and Bladder





## **Prostate Stepper Template**

The prostate stepper template is an excellent solution for applying interstitial techniques in HDR prostate treatments. It is placed in a stepper holder, which is available for various ultrasound stepper devices.

#### Convenient design supporting a variety of needles

The prostate stepper template is designed for guidance and fixation of OncoSmart ProGuide plastic needles in sizes 5F and 6F. This square light-weight template has a universal 5 mm grid array and a single-action locking system that locks all implanted needles in a single movement. The single-action locking system accelerates the procedure and is designed to eliminate inadvertent movement of individual needles. Optional grid face plates for the template correspond with the grid of the ultrasound system used, such as GE/Siemens and B&K ultrasound systems. Grid face plates help determine the correct needle position with use of the ultrasound image, and can be mounted on the template itself or on the stepper holder.

# Part of the real-time prostate brachytherapy solution

Elekta's real-time prostate brachytherapy solutions were developed with one goal in mind: to offer a real-time workflow for HDR and LDR prostate brachytherapy, in which the treatment is, or can be, provided in a single session. The integration of all components in one prostate brachytherapy solution ensures that products interact seamlessly. With a design leading to highly conformal and uniform prostate brachytherapy treatment plans, users can be sure that clinical objectives are met in the most efficient and dedicated way. The prostate stepper template is best used in combination with ProGuide needles and OncoSelect stepper and 1.9 mm stainless steel needles.

#### Intended for:

- · Prostate
- $\cdot \; \text{Vagina}$
- · Perineum
- · Rectum

#### Note:

- $\cdot$  Holder and grid face plates need to be ordered separately
- · User manual 090.699

#### **Order information**

Complete prostate stepper template set 5F, part # 189069

Quantity	Part number	Description
1	189066	Prostate stepper template, 5F
2	189604 ●	OncoSmart ProGuide sharp needle set, 5F x 240 mm

#### Prostate stepper template set, 5F part #189066

Quantity	Part number	Description
1	189157	Base plate stepper 5F
1	189160	Front plate stepper 5F
1	189166	Fixation plate support assembly
1	189164 🔵	Disposable fixation plates 5F, 10 pcs
1	189167	Eccentric axle
2	189170	Assembly bolt template
1	189205	Assembly screwdriver
1	189173	Fixation screwdriver
1	189041	Cleaning brush set Ø3 x 100 mm
1	189043	Cleaning brush set Ø6.5 x 100 mm

#### Fixation plates

Part number	Description
189164 🔵	Set of 10 disposable fixation plates, 5F (5 $\times$ 2)

#### Complete prostate stepper template set 6F, part # 189070

Quantity	Part number	Description
1	189067	Prostate stepper template, 6F
2	189602 ●	OncoSmart ProGuide sharp needle set, 6F x 200 mm

#### Prostate stepper template set, 6F part # 189067

Quantity	Part number	Description
1	189158	Base plate stepper 6F
1	189161	Front plate stepper 6F
1	189166	Fixation plate support assembly
1	189165 🔵	Disposable fixation plates 6F (10 pcs)
1	189167	Eccentric axle
2	189170	Assembly bolt template
1	189205	Assembly screwdriver
1	189173	Fixation screwdriver
1	189041	Cleaning brush set Ø3 x 100 mm
1	189043	Cleaning brush set Ø6.5 x 100 mm

#### Fixation plates

Part number	Description
189165 🔵	Set of 10 disposable fixation plates, 6F (5 x 2)

#### Stepper holders

Part number	Description	
189071	Stepper holder set, Tayman	
189083	Stepper holder assembly, Tayman 44.5 mm	
189075	Stepper holder assembly, Tayman 73.4 mm	
189072	Stepper holder set, OncoSelect	
189076	Stepper holder assembly, OncoSelect	
189092	Stepper holder set, B-K	
189095	Stepper holder assembly, B&K	
189093	Stepper holder set, Barzell-Whitmore	
189096	Stepper holder assembly, BW-MB	

# Why the prostate stepper template?

- Single-action needle locking supports fast and secure implants
- Universal grid array for easy guidance of needles
- Compatible with a wide range of stepper devices

"When performing prostate HDR brachytherapy, you need flexible tools to adapt to all clinical situations. The prostate stepper template gives you exactly what you need." Alberto Bossi, MD

#### Gustave Roussy Genito Urinary Oncology Head of Prostate Brachytherapy Unit Villejuif Cedex, France

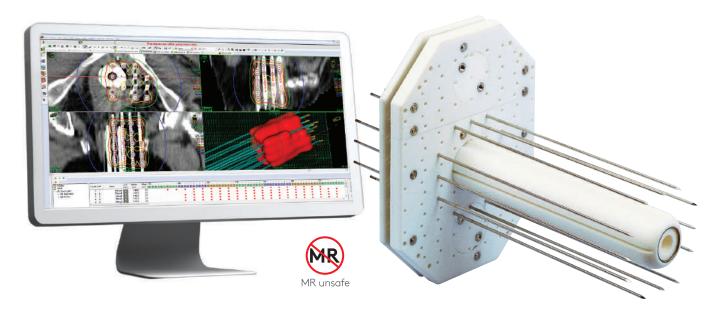
#### Grid face plates

Part number	Description	
189073	Grid face plate set, GE/Siemens	
189174	Grid face plate, GE/Siemens	
189206	Grid L-frame for GE/Siemens	
189074	Grid face plate set, B&K	
189175	Grid face plate, B&K	
189207	Grid L-frame, B&K	

#### Optional items

Part number	Description	
504910R	LBB screw 2.5 x 4R	

Consumables information		
	Single use, delivered sterile	
	Single use, delivered non-sterile	



## Martinez Universal Perineal Interstitial Template (MUPIT) Applicator

The MUPIT applicator is designed for interstitial placement of needles (1.5 mm or 1.9 mm) to treat cancer in the perineum, rectum or vagina. The periphery of the template has angled holes for the needles to reach the widest tumor spread. Rectal and vaginal cylinders are included to provide better template stability and additional treatment options.

#### Intended for:

- · Perineum
- · Rectum
- $\cdot \; \text{Vagina}$

- $\cdot$  Only metal needles (Ø 1.5 or 1.9 mm) can be used with these sets. ProGuide needles cannot be used
- The applicator can be sterilized using steam sterilization or ethylene oxide
- · User manual 090.629

Complete set Ø 1.5 mm, part # 089055 Complete set Ø 1.9 mm, part # 083570

Complete sets consist of:

Quantity	Ø 1.5 mm set Part number	Ø1.9 mm set Part number	Description
1*	089056	083571	MUPIT subset
35*	083918	083054	Trocar needle 120 mm
35*	083922	083058	Trocar needle 160 mm
35*	083926	083062	Trocar needle 200 mm
3*	089005	083254	Obturator 120 mm
3*	089009	083258	Obturator 160 mm
3*	089013	083262	Obturator 200 mm

#### Template subset Ø 1.5 mm, part # 089056 Template subset Ø 1.9 mm, part # 083571

Template subsets consist of:

Quantity	Ø1.5 mm set Part number	Ø 1.9 mm set Part number	Description
1	045459	083590	Base plate, small
1	045457	083588	Base plate filler, 12 mm hole
2	045	450	Cover plate filler, needles
1	045	449	Cover plate filler, 8 mm hole
1	045460	083586	Rectal cylinder
2			Screw for base plate
1	045458	083589	Base plate, large
3	045456	083587	Base plate filler, needles
1	045	443	Cover plate
1	045	448	Cover plate filler, 12 mm hole
1	045461	083581	Vaginal cylinder
3	045171	083289	Cylinder adapter, needle
14	045	172	Fixing screw, cover plate
2	_	_	Screw for cylinder
2			Screw for 045449
1	598026		Allen key screwdriver, 2.5 mm
1	045004		Torque screwdriver, 1.27 mm
1	089025	045303	Needle stopper (4 x 10 pcs)
2	045455		Fixing screw, for 045449

# Why the MUPIT applicator?

- Easy-to-use template for a variety of bodysite treatments
- Needle placement provides dose optimization to the area of interest

#### Prostate, Rectum and Bladder



## **Intracavitary Mold Applicator**

# Enhanced conformal dose delivery in intracavitary brachytherapy

Brachytherapy offers an exciting opportunity for tailored coverage of the treatment target in intracavitary treatments such as endorectal brachytherapy. The intracavitary mold enables a highly conformal intracavitary solution that facilitates short treatment times.

#### Co-developed with leading specialists

The intracavitary mold has been developed in the context of the High Dose Rate endorectal brachytherapy (HDREBT) protocol of the McGill University Health Center in Montreal, Canada, aimed at tumor downgrading and down-staging before (neo-adjuvent) surgery.

#### Effective, comfortable and efficient

The intracavitary mold has been designed to tailor the dose to asymmetrically located tumors in anatomical cavities. Its flexible cylinder material can be bent gently during insertion to minimize patient discomfort while it optimizes conformal target coverage. Eight radially spaced treatment catheters, placed just under the cylinder surface, can be differentially loaded on a slice-by-slice basis along the entire tumor length to ensure tailored target coverage that spares uninvolved tissue.

The central opening in the applicator can accommodate an optional central treatment catheter. Alternatively, the central opening can be used to insert shielding solutions provided by the user.

#### Intended for:

· Rectum

- The intracavitary molds are single-packed and for single use only
- Kink protection sets are packed separately (5 sets per box)
- The reusable parts of this applicator can be sterilized using steam sterilization (at 134°C/273°F)
- · User manual 090.705

#### Order information for Flexitron

Intracavitary mold applicator set Ft, part # 110224

Part number	Description	
110544 •	Intracavitary mold set Ft (box 5)	
189099	Support block	
189256	Number tag ring	
189264	Insertion tool Ø 4 mm	
189257	Insertion tool Ø 8 mm	
189277	Insertion tool Ø 10 mm	
089786	Screwdriver	
189040	Cleaning brush set Ø 2.5 mm x 250 mm (set of 3)	
189043	Cleaning brush set Ø 6.5 mm x 100 mm (set of 3)	

#### **Optional items**

Part number	Description	
110544	Intracavitary mold set (Ft) Ø 20 mm (box of 5)	
110390 •	Central catheter set (box of 5)	
137089	X-Ray set 40 cm (CH 3-11)	
189538	Kink protection set (box of 5)	
189932	Applicator clamp and base plate	
189931	Applicator clamp with axle	

#### Order information for microSelectron

Intracavitary mold applicator set, part # 189011

Part number	Description	
189094 •	Intracavitary mold set, Ø 20 mm (box of 5)	
189099	Support block	
189256	Number tag ring	
189264	Insertion tool Ø 4 mm	
189257	Insertion tool Ø 8 mm	
189277	Insertion tool Ø 10 mm	
089786	Screwdriver	
189040	Cleaning brush Ø 2.5 mm x 250 mm (set of 3)	
189043	Cleaning brush Ø 6.5 mm x 100 mm (set of 3)	

# Why the intracavitary mold applicator?

- Tailor the dose to asymmetrically located intracavitary tumors
- · Minimize patient discomfort

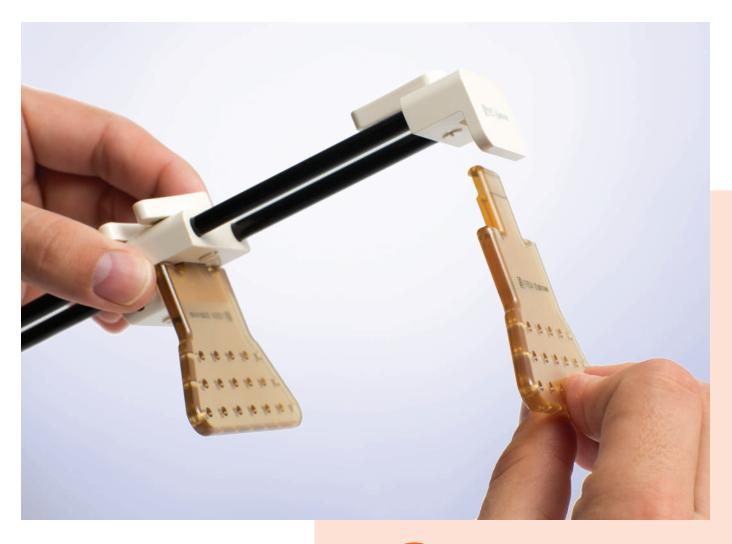
#### **Optional items**

Part number	Description
189094 •	Intracavitary mold set, Ø 20 mm (box of 5)
189100 •	Central Catheter Set (box of 5)
189538 •	Kink protection set (box of 5)
189932	Applicator clamp and base plate
189931	Applicator clamp with axle

#### Consumables information

Single use, delivered sterile

# Bredst



# Content

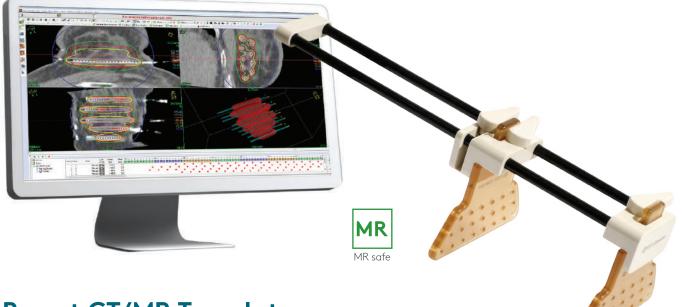
#### **Breast Templates**

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#### **OncoSmart Catheters**

CT/MR OncoSmart Catheter

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## **Breast CT/MR Template**

#### Always the right breast template for your patient

The advanced breast CT/MR template smoothly guides needles for multicatheter implants. The template's lightweight design supports patient comfort. Levers allow easy assembly and placement of the templates for treatment. The non-metallic materials enable template use in combination with CT and MR imaging.

#### Convenience through preconfigured templates

A range of preconfigured templates is included in the set, offering the best choice for a particular implant. Each of these template configurations provides a dose distribution according to the Paris dosimetry system.

#### Intented for:

· Interstitial breast brachytherapy

- $\cdot$  CT and MR compatible (all field strengths)
- The breast CT/MR template can be sterilized using steam sterilization
- · User manual 777.00141

Breast CT/MR template set, part # 110518

Part number	Set components		
110517	Adjustable template bridge		
110536	Set of template levers		
110516	Double plane, 10 mm template pairs, 5 pairs: 3-4, 4-5, 5-6, 6-7 and 7-8 holes		
110519	Double plane, 16 mm template pairs, 5 pairs: 3-4, 4-5, 5-6, 6-7 and 7-8 holes		
110520	Triple plane, 10 mm template pairs, 4 pairs: 3-4-5, 4-5-6, 5-6-7 and 6-7-8 holes		
110523	Triple plane, 16 mm template pairs, 4 pairs: 3-4-5, 4-5-6, 5-6-7 and 6-7-8 holes		

#### **Optional items**

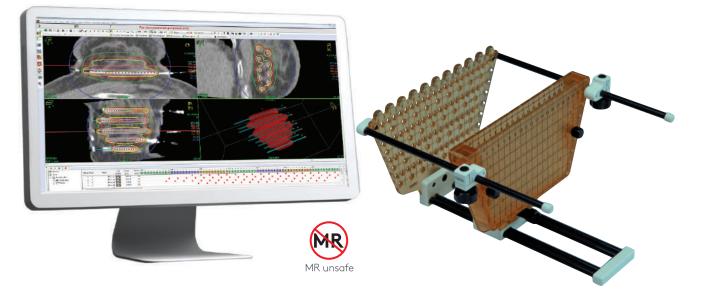
Part number	Set components		
110528	Double plane, 12 mm template pairs, 5 pairs: 3-4, 4-5, 5-6, 6-7 and 7-8 holes		
110529	Double plane, 14 mm template pairs, 5 pairs: 3-4, 4-5, 5-6, 6-7 and 7-8 holes		
110530	Double plane, 18 mm template pairs, 5 pairs: 3-4, 4-5, 5-6, 6-7 and 7-8 holes		
110532	Triple plane, 12 mm template pairs, 4 pairs: 3-4-5, 4-5-6, 5-6-7 and 6-7-8 holes		
110533	Triple plane, 14 mm template pairs, 4 pairs: 3-4-5, 4-5-6, 5-6-7 and 6-7-8 holes		
110534	Triple plane, 18 mm template pairs, 4 pairs: 3-4-5, 4-5-6, 5-6-7 and 6-7-8 holes		
various* •	ProGuide needles 5F and 6F		
various*	Metal needles Ø 1.5 and Ø 1.9 mm		
various* •	OncoSmart catheter		

Consumables information Single use, delivered sterile

\*See section Needles and flexible implant tubes, page 82

# Why the breast CT/MR template?

- Smooth needle guidance for multicatheter implants
- · Easy assembly of templates
- · Lightweight design reduces patient discomfort
- $\cdot$  CT and MR compatible



## **Kuske Breast Applicator**

The Kuske breast applicator was developed in close cooperation with Dr. Robert Kuske. The adjustable template with integrated guiding plate ensures exact placement of needles and OncoSmart catheters or flexible implant tubes. The single large template paired with special hole geometry ensures optimal coverage of the complete target volume. Markers are integrated in the template to aid the imaging procedures and provide the opportunity to optimize positioning of the template.

- The Kuske breast template can be sterilized using ethylene oxide
- · User manual 090.706
- · Sterilization Advice Chart 094.446

Kuske breast applicator set, part #189006

Quantity	Part number	Description
1	189012	Kuske breast template set
6	189307	Leader insertion needle, 1.5 x 200 mm (box of 36)
1	189231	Insertion tool
6	189300 •	CT/MR flexible implant tube, 6F, single Leader, 30 cm (box of 36)
1	189282 ●	Radio-opaque button white, 6F (box of 72)
1	189284 ●	Radio-opaque button black, 6F (box of 72)
1	189286 ●	Radio-opaque button red, 6F (box of 72)
1	189288 ●	Radio-opaque button blue, 6F (box of 72)
1	189290 ●	Radio-opaque button green, 6F (box of 72)
1	189041	Cleaning brush Ø 3 x 100 (set of 3)
1	189043	Cleaning brush Ø 6.5 x 100 (set of 3)
1	189367	Cutter flexible implants

#### Kuske breast template set, part #189012

Quantity	Part number	Description
1	189015	Kuske breast template holder
1	189026	Left template clamp
1	189027	Right template clamp
1	189046	Implant template
1	189047	Target template
1	189048	Guiding template
2*	189222	Implant template fixation nut
2	189223	Bridge fixation nut
2	189224	Target template fixation nut
2	189225	Slide fixation
2*	189226	Guiding template fixation nut

\*When ordered separately, the minimum order quantity is 5 pcs

#### **Optional items**

Part number	Description	
594456	Emergency button cutter	
189292 •	Radio-opaque button yellow, 6F, (box of 72)	
189294 ●	Radio-opaque button brown, 6F, (box of 72)	
089420	X-ray catheter set, 30 cm (1-18)	
030100	Push-fit disconnection tool	
089348	Kink protection tube for 6F flexible*	
089345	Kink protection tube for transfer tube*	

\*Minimum order quantity is 50 pcs

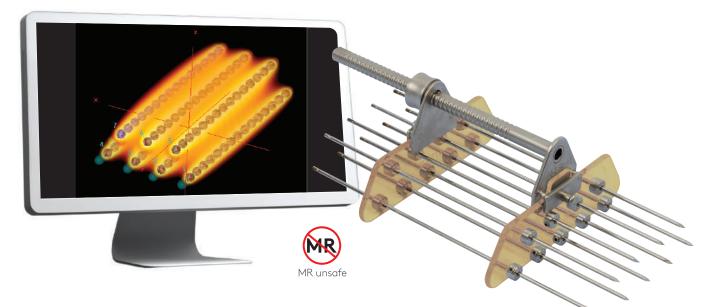
Consumables information Single use, delivered sterile

# Why the Kuske breast applicator?

- Designed for optimal fit with patient anatomy
- Optimal target coverage including wide volumes
- · Excellent dose conformity

"The applicator enables the user to create large volume breast implants. The adjustable template has an integrated guiding template, which ensures an exact placement of needles and flexible implants or OncoSmart catheters. Also, the single large template has a special hole geometry This applicator allows for excellent coverage of the target volume and an optimized conformity with the patient's anatomy."

**R. Kuske, MD** Arizona Oncology Services Scottsdale, Arizona, U.S.



# Rowland Adjustable Breast Template (RABIT)

The RABIT holder was developed to ensure parallel positioning of the template pairs. The breast template provides a dose distribution according to the Paris dosimetry system. It includes a subset of single, double and triple plane template pairs with different basal distances. This means all target areas can be covered with this template.

#### Intended for:

· Interstitial breast brachytherapy

- $\cdot$  The template can be sterilized using steam sterilization
- · User manual 090.637
- · Sterilization Advice Chart 094.210

Complete RABIT set, part # 045006

Quantity	Part number	Description
1	045033	RABIT template holder
1	045021	Double plane, 10 mm template pairs (5)
1	045024	Double plane, 16 mm template pairs (5)
1	045026	Triple plane, 10 mm template pairs (3)
1		Single plane, 10 mm template pairs (5)
1		Single plane, 16 mm template pairs (5)
1	045029	Triple plane, 16 mm template pairs (3)

#### Required optional items

Quantity	Part number	Description
1 (Either)	083040 or 083900	Interstitial needle set
	189400 •	Flexible implant tube set, 6F, 30 cm
	189007 or 189410	OncoSmart catheter set

#### Optional optional items

Quantity	Part number	Description
1	045022	Double plane, 12 mm template pairs (5)
1	045023	Double plane, 14 mm template pairs (5)
1	045025	Double plane, 18 mm template pairs (5)
1	045037	Double plane, 20 mm template pairs (5)
1	045027	Triple plane, 12 mm template pairs (3)
1	045028	Triple plane, 14 mm template pairs (3)
1	045030	Triple plane, 18 mm template pairs (3)
1	045036	Triple plane, 20 mm template pairs (3)

#### Consumables information

Single use, delivered sterile

### Why the RABIT?

- The adjustable template holder will assist in immobilization and needle/implant tube placement
- Different template configurations provide dose optimization to the volume of interest



# CT/MR OncoSmart Catheter

#### For outpatient breast brachytherapy

The CT/MR OncoSmart catheter is an elegant treatment solution for breast brachytherapy. The system allows breast brachytherapy treatments on an outpatient basis, enabling the patient to resume daily life between fractions. It is ideally suited for treatment regimens such as Accelerated Partial Breast Irradiation (APBI ) or the delivery of a brachytherapy boost dose as part of Whole Breast Irradiation (WBI).

In addition to breast brachytherapy, the CT/MR OncoSmart catheter can also be used for brachytherapy in head and neck, tongue and soft tissue cases.

#### **Optimizing clinical workflow**

The CT/MR OncoSmart catheters are delivered sterile and ready for immediate use. The treatment catheters are inserted only once, at the start of the actual treatment, and remain in place in between fractions. Small buttons with corresponding channel numbers fix the catheters in place and are used for accurate and quick reconnection for sequential fractions. Tailored material characteristics make OncoSmart catheter optimally visible on either CT or MR images.

#### Intended for:

- · Breast
- $\cdot$  Head and Neck
- Sarcomas
- · Tongue

- The catheter set contents are for single use only and are delivered sterile, with the exception of the 4F ProGuide
- $\cdot$  Insertion needles and the stop tags are delivered unsterile
- · Set contents are packed per 6 items, except for # 189802
- · User manual 090.709

CT/MR OncoSmart catheter system

Part number	Description		
189416 ●	CT/MR OncoSmart catheter system, I = 240 mm: contains 30 flexible implant tubes (5 x 6 tubes), 4F ProGuide needles (240 mm), stop tags, buttons, and insertion needles (200 mm))		
189418 •	CT/MR OncoSmart catheter system, I = 240 mm: contains 18 flexible implant tubes (3 x 6 tubes), 4F ProGuide needles (240 mm), stop tags, buttons, and insertion needles (200 mm)		
189802 ●	CT/MR OncoSmart catheter system, I = 240 mm, single package: contains 6 flexible implant tubes, 4F ProGuide needles (240 mm), stop tags, buttons, and insertion needles (200 mm)		
189801 ●	CT/MR OncoSmart catheter system, I = 200 mm, for Head and Neck: contains 6 flexible implant tubes, 4F ProGuide needles (200 mm), stop tags, buttons, and insertion needles (160 mm)		
189840 •	CT/MR OncoSmart catheter system, I = 294 mm: contains 30 flexible implant tubes (5 x 6 tubes), 4F ProGuide needles (294 mm), stop tags, buttons, and insertion needles (280 mm)		
189846 ●	CT/MR OncoSmart catheter system, I = 294 mm: contains 30 fexible implant tubes (5 x 6 tubes), 4F ProGuide needles (294 mm), stop tags, buttons, and insertion needles (200 mm)		

#### CT/MR OncoSmart catheter system, part # 189410

Quantity	Part number	Description
5	189418 ●	CT/MR OncoSmart catheter system, I = 240 mm: contains 3 x 6 flexible implant tubes, 4F ProGuide needles (240 mm), stop tags, buttons, and insertion needles (200 mm)
1	189016	OncoSmart flange molding system

#### OncoSmart introduction system, part # 103111

Part number	Description	
189410 •	CT/MR OncoSmart catheter set: contains 189418 (sterile, single use) and 189016 (non-sterile, re-usable)	
189012	Kuske breast template	
189231	Insertion tool	
189036	CT-marker system, 240 mm, black	
030100	Push fit disconnection tool	
	Transfer tube set for microSelectron 4F flexibles (see transfer tube appendixes for Flexitron and microSelectron)	

#### OncoSmart flange molding system, part # 189016

Quantity	Part number	Description
1	189320	Flange molding tool
2	417018	Li-ion battery Pack
1	417006	Battery charge station
1	189316	Flange molding cutter
1	189367	Cutter flexible implants
1	189369	Spare part set flange molding tool

#### Why the CT/MR OncoSmart catheter?

- A single multicatheter implant serves multiple treatment fractions
- Allows patients to resume daily life between fractions
- Enables quick and accurate catheter reconnection for follow-up fractions

#### OncoSmart Upgrade set for microSelectron, part #103110

Part number	Description	
189410 •	CT/MR OncoSmart catheter set: contains 189418 (sterile, single use) and 189016 (non-sterile, re-usable)	
189036	CT-marker set 240 mm black	
030100	Push fit disconnection tool	
	Transfer tube set for microSelectron 4F flexibles (see transfer tube appendixes for Flexitron and microSelectron)	

#### OncoSmart Upgrade set for Flexitron, aggregate

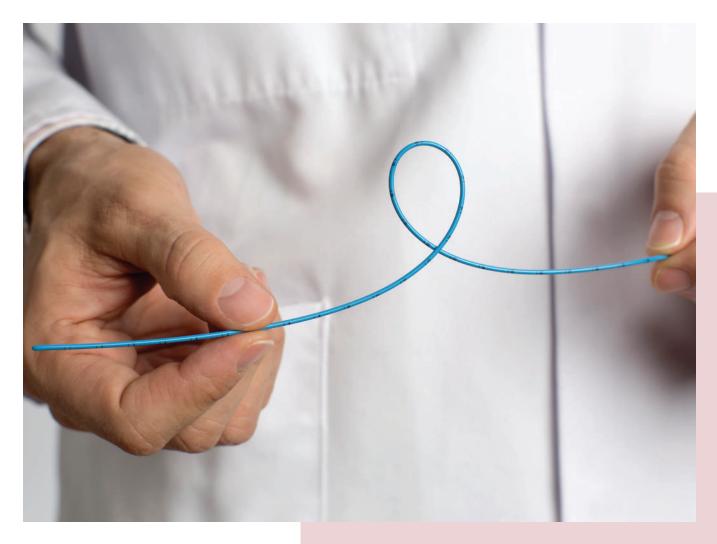
Part number	Description	
189410 •	CT/MR OncoSmart catheter set: contains 189418 (sterile, single use) and 189016 (non-sterile, re-usable)	
189036	CT-marker set 240 mm black	
030100	Push fit disconnection tool	
111850	Transfer tube set for 4F, flexibles (1-10)	
111861	Transfer tube set for 4F, flexibles (11-20)	

#### OncoSmart Breast Introduction Set, part # 103108

Quantity	Part number	Description
1	189410 •	CT/MR OncoSmart catheter
1	189012	Kuske breast template
2	189231	Insertion tool
2	189036	CT-marker set 240 mm black
1	030100	Push fit disconnection tool
1	111071	Transfer tube set for 4F, flexibles (1-9)
1	111081	Transfer tube set for 4F, flexibles (10-18)

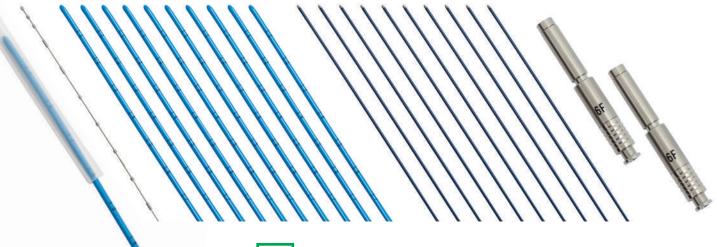
Consumables information Single use, delivered sterile

# Bronchus and Esophagus



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MR safe\*

### LumenCare® Azure Applicator

The LumenCare Azure applicator offers clinicians an excellent solution for lung brachytherapy applications. It is specifically designed to improve the delivery of lung cancer brachytherapy treatments, expanding the treatable area.

The innovative, contrasting blue-tinted material of the applicator combines kink resistance with flexibility. This novel design permits easy passage through tumor obstructions and improves access to the upper lobe, where many tumor obstructions are found.

#### **Optimal flexibility and kink resistance**

With an impressively small bending radius, LumenCare Azure catheters provide unmatched flexibility and strength to treat even the most demanding lung brachytherapy cases.

#### **High visibility**

The contrasting blue tint of the catheter provides excellent visualization within the bronchoscope, facilitating easy insertion of the catheter.

#### Easy insertion into the bronchus

The smoothness of the catheter enables easy insertion and smooth source travel into the bronchus or any other lumen, facilitating fast and simple lung brachytherapy procedures.

\*The adapter and fixing mask are not MR safe

# Advanced solution for the most complex procedures

State-of-the-art material characteristics make hardto-reach places more easily accessible. In the event that the catheter gets obstructed (e.g. through coughing), guide wires are supplied, allowing easy completion of the procedure.

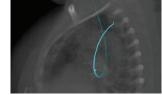
#### Intended for:

- Intraluminal brachytherapy
- Treatment of the lung or other lumen, e.g. bronchus and bile duct

#### Note:

· User manual: 777.00266





Images courtesy of the UZL Gasthuisberg, Leuven, Belgium

#### Order information for Flexitron

LumenCare Azure 5F x 140 cm, part # 110691

Quantity	Part number	Description
2	110690 •	LumenCare Azure 5F x 140 cm box (5 pcs)
1	137673	X-ray marker channel 1- 140 cm
2	137064	Applicator adapter 5F

#### Optional items for Flexitron

Part number	Description	
110690 •	LumenCare Azure 5F x 140 cm box (5 pcs)	
084099	Fixation mask	
089512	X-ray marker channel 2 – 150 cm	
089513	X-ray marker channel 3 – 150 cm	
137674	X-ray catheter 2, 140 cm	
137801	X-ray catheter 3, 140 cm	
137064	Applicator adapter 5F	

#### Order information for microSelectron

Lumencare Azure, 5F x 150cm, part # 110687

Quantity	Part number	Description
2	110686 ●	LumenCare Azure 5F x 150 cm (5 pcs)
1	089511	X-ray marker channel 1 - 150 cm
2	080024	Applicator adapter 5F

#### Optional items for microSelectron

Part number	Description	
110686 •	LumenCare Azure 5F x 150 cm (5 pcs)	
084099	Fixation mask	
089512	X-ray marker channel 2–150 cm	
089513	X-ray marker channel 3–150 cm	
080024	Applicator adapter 5F	

#### Consumables information

Single use, delivered sterile

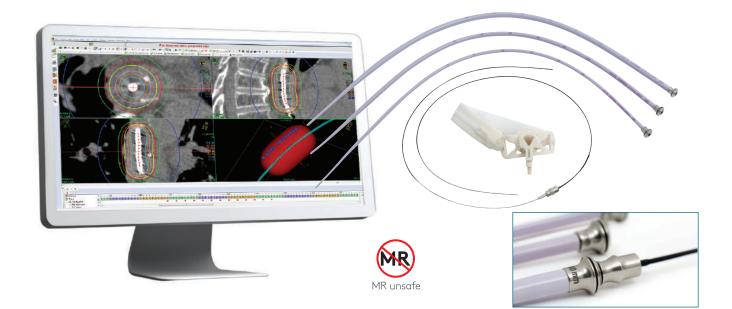
# Why the LumenCare Azure applicator?

- Highly flexible and kink-resistant material to reach challenging tumor locations
- Smoothness of catheter facilitates fast and simple lung brachytherapy procedures
- Superior visibility allows for easy insertion into bronchus

"The more flexible and kink-resistant material of the LumenCare Azure makes it much easier to reach tumors in the upper lobe, an area where many of the lung tumors tend to occur."

#### Janusz Skowronek, PhD, Asst. Prof. Head of Brachytherapy Department Greater Poland Cancer Centre Poznań, Poland

#### **Bronchus and Esophagus**



## **Bonvoisin-Gérard Esophageal Applicator**

The Bonvoisin-Gérard esophageal applicator is designed to assist in the treatment of an endoscopically obstructed esophagus. By using this special dilation applicator with tapered flexible tip, the treatment area can be reached by bouginage. The bougie tube will also assist in centering the treatment catheter internally to minimize the mucosal dose, while ensuring optimal depth dose penetration of the esophageal wall. Radiographic markers on the bougie tube aid in fluoroscopic placement and localization of the applicator.

#### Intended for:

· Esophagus

- No transfer tube is required—the applicator connects directly to the afterloader
- $\cdot$  Separate applicator sets are <u>only</u> available for Flexitron afterloaders
- · Flexitron needs an applicator adapter, see Optional items
- · 094.353 Sterilization Advice Chart for # 085035
- · User manual 777.00116 for # 137258

#### Currently only available for Flexitron

Bonvoisin-Gérard esophageal applicator set, part # 137258

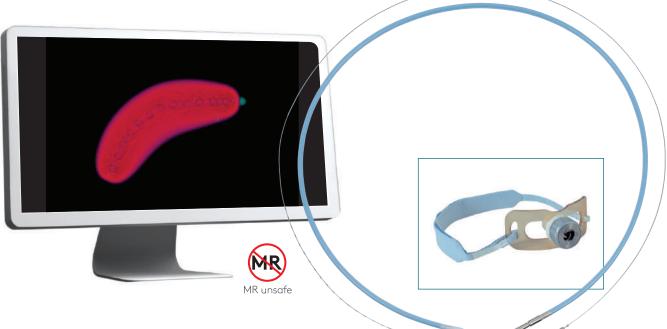
Part number	Description	
137259	1400 mm flexible treatment catheter	
137261	Bonvoisin-Gérard esophageal appl., 18F (Ø 6 mm)	
137263	Bonvoisin-Gérard esophageal appl., 24F (Ø 8 mm)	
137265	Bonvoisin-Gérard esophageal appl., 30F (Ø 10 mm)	
137276	Applicator fixation mask	
137277	Applicator cleaning accessories	
137279	Applicator mask strap (pack of 5)	

#### **Optional items for Flexitron**

Part number	Description	
137267	Applicator 36F (Ø 12 mm)	
137270	Applicator 45F (Ø 15 mm)	
137278	Guide wire pack of 5 pcs (sterile) 2.6 m	
137064	Adaptor for 5F catheters	
137673	X-ray marker # 1, 140cm	

# Why the Bonvoisin-Gérard esophageal applicator?

- Easy applicator insertion using endoscopy
- · Excellent source centering
- Radio-opaque applicator marking assists placement and localization



# **Esophageal Applicator**

The esophageal applicator is designed for direct insertion into the esophagus. The applicator can be positioned orally under fluoroscopy or endoscopic examination. It is provided with an additional outer layer to reduce the dose to the esophageal mucosa and support applicator integrity.

- · The minimum curvature is 25 mm
- $\cdot$  No transfer tube is required. The applicator connects directly to the indexer
- This applicator set can <u>only</u> be used on microSelectron HDR afterloaders
- $\cdot$  The applicator can be sterilized using ethylene oxide
- · User manual 090.607
- · Sterilization advice chart 094.607

Esophageal applicator 8 mm, 100 cm set, part # 085005

Quantity	Part number	Description
2	085006	Esophageal applicator, d = 8 mm, 100 cm
1	189004	Esophageal fixing mask set
1	089401	X-ray catheter # 1, 100 cm
1	084170	Sterilizing caps, 6 mm, 50 pcs

# Esophageal applicator 6 mm, 100 cm set, part # 084011

Quantity	Part number	Description
2	084012	Esophageal applicator, d = 6 mm, 100 cm
1	189004	Esophageal fixing mask set
1	089401	X-ray catheter # 1, 100 cm
1	084170	Sterilizing caps, 6 mm, 50 pcs

Esophageal applicator 6 mm, 150 cm set, part # 085055

Quantity	Part number	Description
2	085056	Esophageal applicator, d = 6 mm, 150 cm
1	189004	Esophageal fixing mask set
1	089511	X-ray catheter # 1, 150 cm
1	084170	Sterilizing caps, 6 mm, 50 pcs

#### **Optional items**

Part number	Description	
085007	Esophageal applicator, d = 8 mm, 150 cm (for part # 085055)	
085006	Esophageal applicator, d = 8 mm, 100 cm (for part # 084011)	
084012	Esophageal applicator, d = 6 mm, 100 cm (for part # 085005)	
189108	Rubber bite	
089401	X-ray catheter # 1, 100 cm, (1 pcs)	

Esophageal fixing mask set, part #189004

Part number	Description	
189056	Mask	
189108	Rubber bite	
592691	Straps	

# Why the esophageal applicator?

- Specific outer applicator surface reduces dose to mucosa
- Easy applicator insertion using fluoroscopy

# Head and Neck



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Breast





# **Rotterdam Nasopharyngeal Mold Applicator**

# Optimal dose shaping in nasopharyngeal cavities

The Rotterdam nasopharyngeal mold is manufactured from a flexible silicone material to easily shape the radiation dose in the nasopharyngeal cavity. It consists of two channels on the upper surface to optimize the dose distribution and reduce the surface dose. The mold can remain in place for a series of treatment fractions, while the treatment catheters will be replaced per fraction. This way, patient discomfort between fractions is minimized.

- The mold applicator and catheter set are deliverd unsterile and are for single use only
- User manual 090.678

Rotterdam Nasopharyngeal Mold set, part # 089068

Quantity	Part number	Description
5	089062 🔵	Nasopharyngeal mold applicator
5	089061 🔍	Nasopharyngeal catheter set
1	089421	X-ray catheter no. 1; 30 cm
1	089422	X-ray catheter no. 2; 30 cm
1	594588*	K-Y lubricating gel; tube 82 gr

#### Consumables information

Single use, delivered non-sterile

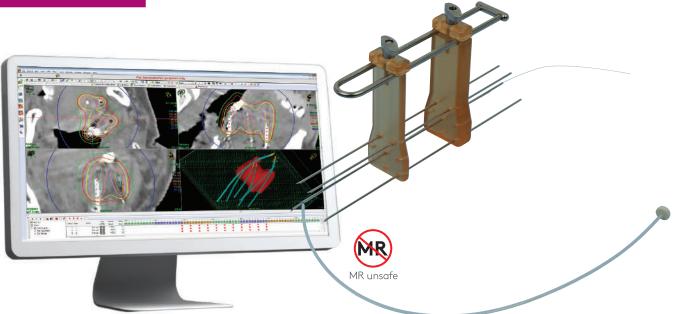
\*When ordered separately, the minimum order quantity is 10 pcs

# Why the Rotterdam nasopharyngeal mold applicator?

- Easily conforms to a range of nasopharyngeal cavity sizes
- Dual-channel design for optimized dose distribution
- Quick catheter reinsertion for follow-up fractions

"I wanted an applicator that was easy to use, did not require a general anesthetic and that would closely conform to the mucosa of the nasopharynx. I found it in the Rotterdam nasopharyngeal applicator."

**Prof. Dr. P. Levendag** Daniel den Hoed Clinic Rotterdam, The Netherlands



# **Pipard Tongue Template**

The Pipard tongue template is designed for accurate placement of needles and flexible implant tubes in the base of the tongue. A variety of template configurations provides the option of dose optimization to the area of interest, while a reproducible dosimetry can be achieved. The template can be used for the looping implantation technique by using double leader flexible implant tubes.

- The applicator can be sterilized using steam sterilization or ethylene oxide
- · User manual 090.641

#### Order information

Pipard tongue template complete set, part # 045410

Quantity	Part number	Description
1	045435	Adjustable tongue template holder
1	045432	Tongue template, 8 holes, 1.5 mm
1	045433	Tongue template, 10 holes, 1.5 mm
10	089700	Leader insertion needle, 1.5 x 120 mm (1 piece)

#### **Optional items**

Part number	Description
089701	Leader insertion needle, 1.5 x 160 mm (1 piece)
089702	Leader insertion needle, 1.5 x 200 mm (6 pcs)
various* •	Flexible implant tubes
various* •	OncoSmart catheter

#### Consumables information

Single use, delivered sterile

\*See relevant pages in this guide

### Why the Pipard tongue template?

- · Reproducible dosimetry
- Guidance during needle/implant tube placement
- · Immobilization during treatment

# Skin and Surface



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#### Valencia Skin Applicator

#### Optimal dose coverage to the skin

Brachytherapy offers an excellent non-invasive solution to complement or replace surgery for skin cancer. With our specialized solutions, a high radiation dose can be delivered to the tumor in a few fractions with a low dose to the surrounding area, providing a short and effective treatment.

#### Controlled dosimetry for skin and surface treatments

The Valencia skin applicator is a tungsten-shielded applicator for contact treatments. The applicator's unique fixed flattening filter provides a flat and homogeneous isodose pattern. The flat dose can be applied very precisely to skin and surface targets. This unique applicator was designed in cooperation with La Fe University Hospital in Valencia, Spain.

#### **Reliable treatment**

The Valencia skin applicator also contains a source stopper to secure a distal reference point for the source in the applicator, resulting in a reliable and reproducible treatment. Plastic caps on the applicator help to avoid over-dosage and assist with correct applicator positioning. Reinforced shielding at the back of the applicator adds to patient safety during treatment.

#### Intended for:

 $\cdot$  Skin and surface treatments

#### Note:

- Applicator provided with two types of treatment caps:1) cap with marker
- 2) cap for treatment

The cap with the marker ring is used to determine the correct position of the applicator on the surface

- $\cdot$  Applicator must be used with treatment cap in place
- $\cdot$  The applicator set can be sterilized using steam sterilization
- Dose distribution charts are available for Iridium-192, not available for Cobalt-60. The charts are not included in Oncentra Brachy treatment planning system but delivered seperate charts with the applicator
- · Manual 777.00237

#### Order information for Flexitron

Valencia Ft skin applicator set, part # 110820

Quantity	Part number	Description
1	110821	Valencia Ft skin applicator, d = 20 mm
1	110822	Valencia Ft skin applicator, d = 30mm
2	085115	Cap with marker ring, d = 20 mm
2	085116	Cap with marker ring, d = 30 mm
2	085118	Cap, d = 20 mm
2	085119	Cap, d = 30 mm
1	084158	Sterilization caps (pack of 50)

#### Flexitron advanced skin applicator set for Flexitron, part # 103118FT

The advanced skin applicator set for Flexitron is identical to the microSelectron version, with one difference: the Flexitron set includes part # 110820 Valencia Flexitron skin applicator set instead of part # 189701 Valencia skin applicator set.

#### Order information for microSelectron

Valencia skin applicator set, part # 189701

Quantity	Part number	Description
1	189788	Valencia skin applicator, d = 20 mm
1	189760	Valencia skin applicator, d = 30 mm
2	085115	Cap with marker ring, d = 20 mm
2	085116	Cap with marker ring, d = 30 mm
2	085118	Cap, d = 20 mm
2	085119	Cap, d = 30 mm
1	084158	Sterilization caps (pack of 50)

Advanced skin applicator set, part # 103118

Part number	Description
085041	Leipzig applicator d = 10 mm
085042	Leipzig applicator d = 20 mm
085043	Leipzig applicator d = 30 mm
085114	Cap, d = 10 mm with marking ring
085115	Cap, d = 20 mm with marking ring
085116	Cap, d = 30 mm with marking ring
085117	Cap, d = 10 mm
085118	Cap, d = 20 mm
085119	Cap, d = 30 mm
089095	Freiburg Flap applicator set
189701	Valencia skin applicator set

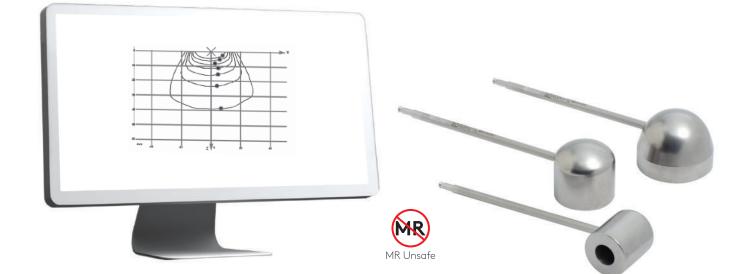
### Why the Valencia skin applicator?

- Non-invasive contact treatment option
- Unique flattening filter for homogeneous and controlled dose coverage

#### Optional items

Part number	Description
189786*	Well chamber adapter for HDR 1000 PLUS (Standard Imaging, Middleton, Wisconsin)
189787*	Well chamber adapter for TM33005 (PTW, Freiburg Germany)
189932	CT/MR applicator clamp with base plate
189931	CT/MR applicator clamp with axle

\*Required for use



#### Leipzig Applicator

The Leipzig applicator is tungsten shielded and designed for treatment of surface lesions, utilizing a contact treatment technique. It can be used for superficial skin, intra-oral and vaginal cuff lesions. It provides an excellent alternative for orthovoltage or electron treatments.

#### Intended for:

· Skin and Surface

#### Note:

- $\cdot$  Applicator provided with caps for imaging and for treatment
- $\cdot$  Applicator must be used with treatment cap in place
- This applicator is also available as part of the Advanced Skin package # 103118
- $\cdot$  The applicator set can be sterilized using steam sterilization
- · User manual 777.00237
- Dose distribution charts are available for Iridium-192, not available for Cobalt-60. The charts are not included in Oncentra Brachy treatment planning system but delivered seperate charts with the applicator

#### Order information

Leipzig applicator set, part # 085040

Part number	Description
085041	Leipzig applicator, d = 10 mm
085044	Leipzig applicator d = 10 mm, straight
085114	Cap, d = 10 mm with marker ring
085117	Cap, d = 10 mm
085042	Leipzig applicator, d = 20 mm
085045	Leipzig applicator d = 20 mm, straight
085115	Cap, d = 20 mm with marker ring
085118	Cap, d = 20 mm
085043	Leipzig applicator, d = 30 mm
085046	Leipzig applicator d = 30 mm, straight
085116	Cap, d = 30 mm with marker ring
085119	Cap, d = 30 mm
084158	Sterilizing caps, 3.2 mm

#### Flexitron advanced skin applicator set for Flexitron, part # 103118

The advanced skin applicator set for Flexitron is identical to the microSelectron version, with one difference: the Flexitron set includes part # 110820 Valencia Flexitron skin applicator set instead of part # 189701 Valencia skin applicator set

#### Advanced skin applicator set for microSelectron, part #103118

Part number	Description
085041	Leipzig applicator d = 10 mm
085042	Leipzig applicator d = 20 mm
085043	Leipzig applicator d = 30 mm
085114	Cap, d = 10 mm with marking ring
085115	Cap, d = 20 mm with marking ring
085116	Cap, d = 30 mm with marking ring
085117	Cap, d = 10 mm
085118	Cap, d = 20 mm
085119	Cap, d = 30 mm
089095	Freiburg Flap applicator set
189701	Valencia skin applicator set

#### Why the Leipzig applicator?

- $\cdot$  Easy to use
- Excellent solution for superficial lesions

"The Leipzig applicators were designed to give the optimum isodose and treat to the correct depth without causing excessive skin reaction."

**Prof. Dr. Prager** Universität Leipzig Leipzig, Germany

#### Skin and Surface





#### **Freiburg Flap Applicator**

#### Shaping surface brachytherapy

The Freiburg Flap is a flexible mesh-style surface mold for skin or intra-operative surface treatments. The flexible applicator can easily be shaped to fit curved surfaces. It is ideally suited for large lesions or surface lesions that are difficult to cover such as on the skull or face.

#### Easily shaped to the target area

The Freiburg Flap consists of multiple spheres attached to each other that hold and guide up to 36 treatment catheters. The applicator can be curved to match the target surface and shaped to match the right size. The Freiburg Flap also ensures a constant distance of 5 mm from the treatment catheter to the surface.

#### Intended for:

- · Skin and Surface
- $\cdot$  Intra-operative

#### Note:

- $\cdot$  Applicable for up to 28 days' implantation
- $\cdot$  Treatment channels are set 10 mm apart from each other, and have a length of 240 mm
- The flexible implant tubes and buttons are delivered sterile and are for single use only
- · User manual 090.677

#### Order information

Freiburg Flap applicator set, part # 089095

Part number	Description
592976	Freiburg Flap
189300 •	CT/MR flexible implant tube 6F, single leader, 30 cm (6 pouches of 6 pcs)
189367	Cutter, flexible implant tubes
189282 •	Radio-lucent button, white (72 pcs)

#### Advanced skin applicator set for Flexitron, part # 103118

The advanced skin applicator set for Flexitron is identical to the microSelectron version, with one difference: the Flexitron set includes part # 110820 Valencia Flexitron skin applicator set instead of part # 189701 Valencia skin applicator set.

#### Advanced skin applicator set for microSelectron, part # 103118

Part number	Description
085041	Leipzig applicator d = 10 mm
085042	Leipzig applicator d = 20 mm
085043	Leipzig applicator d = 30 mm
085114	Cap, d = 10 mm with marking ring
085115	Cap, d = 20 mm with marking ring
085116	Cap, d = 30 mm with marking ring
085117	Cap, d = 10 mm
085118	Cap, d = 20 mm
085119	Cap, d = 30 mm
089095	Freiburg Flap applicator set
189701	Valencia skin applicator set

#### Consumables information

Single use, delivered sterile

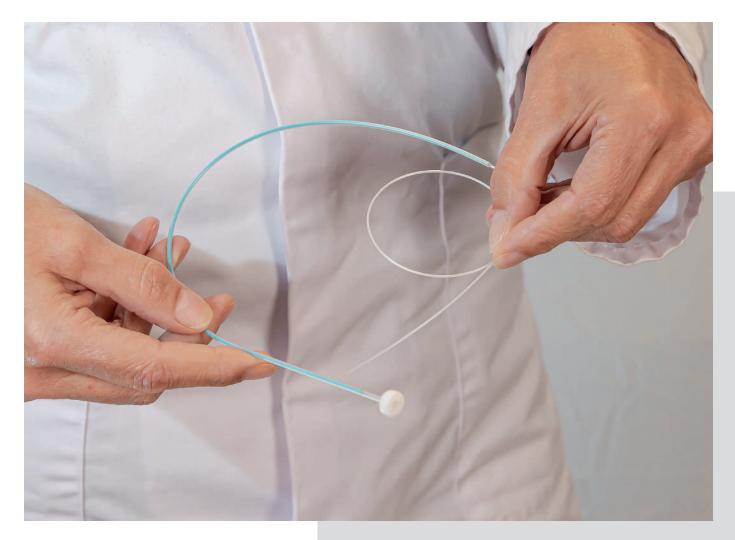
#### Why the Freiburg Flap applicator?

- Adaptable for large and curved anatomies
- Easy to resize to match treatment area
- Consistent thickness for reproducible dosimetry

"The equidistance of the holes guarantees a precise separation of the catheters. The Freiburg Flap material allows a precise positioning in respect of the target and verification of the treatment area."

**Dr. S. Stange** Albert Ludwigs Universität Freiburg, Germany

# Neec es dnd Flexible **Implant** Tubes



## Content

ProGuide needles, obturators and markers

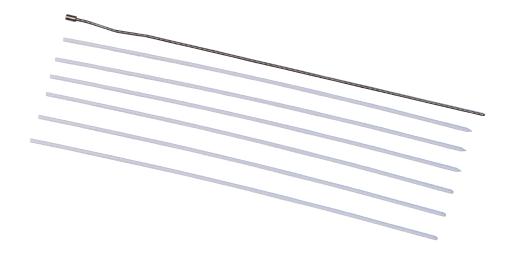
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Stainless steel interstitial needles

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Flexible Implant tubes

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#### **ProGuide Needles, Obturators and Markers**

The range of OncoSmart ProGuide needles has been designed for interstitial applications and is compatible with state-of-the-art imaging modalities such as CT and MR imaging. They are made from a high-quality plastic and specifically developed for use with Elekta afterloaders. ProGuide needles are available with either a sharp tip to enable easy penetration of the skin surface or with a round tip for maximum patient safety during treatment. Rigidity of the plastic ProGuide needle is created by placing an obturator inside the needle during insertion.

The obturator is a rigid tungsten alloy tool that maintains needle stability during insertion, preventing needle kinking or breaking. The curve in the obturator is intentional and prevents the obturator from shifting within the needle during insertion.

The OncoSmart ProGuide CT Markers (see Appendixes) are designed to indicate the first source positions on CT images of ProGuide interstitial needle implants. The markers fit needle diameters from 5F to 6F and are kept in place during imaging by means of a built-in locking mechanism. The markers are reusable and can be autoclaved. Each marker length has a unique color-coded knob.

#### Note:

- ProGuide needles are delivered sterile, and are for single use only
- Obturators must be placed in the ProGuide needle prior to insertion for stability and to avoid needle damage
- Obturators are not delivered sterile and can be processed using steam sterilization or ethylene oxide
- Kink protection tubes are available for use with ProGuide needles
- · User manual 090.695

#### Order information

ProGuide needle sets, 5F, sharp

Part number	Description	
189604 •	ProGuide needle set, 5F, sharp, I = 240 mm, 18 needles (set contains 3 pouches of 6 needles each, and 6 obturators)	
189619 ●	ProGuide needle bulk set, 5F, sharp, I = 240 mm, 55 needles (set contains 8 pouches of 6 needles each, and 7 pouches with single-packed needles)	

\*The obturators are not MR safe

#### ProGuide needle sets, 6F, sharp

Part number	Description
189602 •	ProGuide needle set, 6F, sharp, I = 200 mm, 18 needles (set contains 3 pouches of 6 needles each, and 6 obturators)
189601 •	ProGuide needle set, 6F, sharp, I = 240 mm, 18 needles (set contains 3 pouches of 6 needles each, and 6 obturators)
110231 •	ProGuide needle set, 6F, sharp, I = 294 mm, 5 needles (set contains 5 pouches with single-packed needles. To be used with obturators with part number 110268, not included)
189617 •	ProGuide needle bulk set, 6F, sharp, I = 200 mm, 55 needles (set contains 8 pouches of 6 needles each, and 7 pouches with single-packed needles)'
189616 ●	ProGuide needle bulk set, 6F, sharp, I = 240 mm, 55 needles (set contains 8 pouches of 6 needles each, and 7 pouches with single-packed needles)'

#### ProGuide needle sets, 6F, round

Part number	Description
189608 •	ProGuide needle set, 6F, round, I = 200 mm, 18 needles (set contains 3 pouches of 6 needles each, and 6 obturators)
189607 •	ProGuide needle set, 6F, round, I = 240 mm, 18 needles (set contains 3 pouches of 6 needles each, and 6 obturators)
110230 •	ProGuide needle set, 6F, round, I = 294 mm, 5 needles (set contains 5 pouches with single-packed needles. To be used with obturators with part number 110268, not included)
189623 •	ProGuide needle bulk set, 6F, round, I = 200 mm, 55 needles (set contains 8 pouches of 6 needles each, and 7 pouches with single-packed needles)'
189622 •	ProGuide needle bulk set, 6F, round, I = 240 mm, 55 needles (set contains 8 pouches of 6 needles each, and 7 pouches with single-packed needles)'

#### ProGuide needle sets without obturators

Part number	Description
110580 ●	ProGuide sharp needle set, 6F x 240 mm (3x6)
110581 •	ProGuide sharp needle set, 6F x 240 mm (6x6)
110582 ●	ProGuide sharp needle set, 6F x 240 mm (12x6)
110583 •	ProGuide sharp needle set, 6F x 240 mm (10x1)
110584 •	ProGuide sharp needle set, 6F x 200 mm (3x6)
110585 •	ProGuide sharp needle set, 6F x 200 mm (6x6)
110586 •	ProGuide sharp needle set, 6F x 200 mm (12x6)
110587 •	ProGuide sharp needle set, 6F x 200 mm (10x1)
110588 ●	ProGuide sharp needle set, 5F x 240 mm (3x6)
110589 ●	ProGuide sharp needle set, 5F x 240 mm (6x6)
110590 •	ProGuide sharp needle set, 5F x 240 mm (12x6)
110591 •	ProGuide sharp needle set, 5F x 240 mm (10x1)

### Why ProGuide needles and markers?

- $\cdot$  Flexibility in use
- Compatible with state-of-the-art imaging modalities

#### Obturators

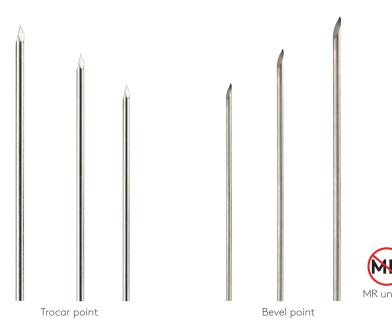
Part number	Description
189628	ProGuide obturator bulk set, 6F x 240 mm (12 pcs)
189629	ProGuide obturator bulk set, 6F x 200 mm (12 pcs)
189631	ProGuide obturator bulk set, 5F x 240 mm (12 pcs)
110268	Obturators, for needles 6F and I = 294 mm (flexible, 5 pcs)
089636	Handle for insertion obturator
089001	Obturator for 1.5 mm needle x 80 mm
089003	Obturator for 1.5 mm needle x 100 mm
089005	Obturator for 1.5 mm needle x 120 mm
089007	Obturator for 1.5 mm needle x 140 mm
089009	Obturator for 1.5 mm needle x 160 mm
089011	Obturator for 1.5 mm needle x 180 mm
089013	Obturator for 1.5 mm needle x 200 mm
083250	Obturator for 1.9 mm needle x 80 mm
083252	Obturator for 1.9 mm needle x 100 mm
083254	Obturator for 1.9 mm needle x 120 mm
083256	Obturator for 1.9 mm needle x 140 mm
083258	Obturator for 1.9 mm needle x 160 mm
083260	Obturator for 1.9 mm needle x 180 mm
083262	Obturator for 1.9 mm needle x 200 mm
083266	Obturator For 1.9 mm needle x 240 mm
083272	Insertion obturator for 1.9 mm needle x 294 mm

Consumables information

Single use, delivered sterile

<sup>1</sup> These sets include obturators

#### **Needles and Flexible Implant Tubes**



#### **Stainless Steel Interstitial Needles**

Interstitial needles are used for treatment of carcinoma where no lumen or cavity is available or where additional and very precise target area coverage is required. The needles are designed to maintain their rigidity and sharpness throughout multiple treatments, in combination with the appropriate templates. Stainless steel needles have a needle tip that is either bevel or trocar shaped. The round tip is designed to minimize tissue damage and optimize ease in implantation. The trocar and bevel tips facilitate insertion in the tissue.

Obturators can be placed inside the needle during insertion to create additional rigidity. The needles are directly connected to the transfer tube of the Elekta afterloader.

#### Note:

- Needles are described by their outside diameter and length
- $\cdot$  Ø 1.3 mm needles can only be used with microSelectron
- Needles should be inspected prior to use. Any needle that is blunt, corroded or bent should be discarded
- Metal needles can be sterilized using steam sterilization and ethylene oxide
- · User manual 090.619

#### Order information

Interstitial needle basic set 1.5 mm, part # 083900

Quantity	Part number	Description
2	083914	Trocar needle, 1.5 mm x 80 mm (10 pcs)
2	083916	Trocar needle, 1.5 mm x 100 mm (10 pcs)
2	083918	Trocar needle, 1.5 mm x 120 mm (10 pcs)
2	083920	Trocar needle, 1.5 mm x 140 mm (10 pcs)
2	083922	Trocar needle, 1.5 mm x 160 mm (10 pcs)
2	083924	Trocar needle, 1.5 mm x 180 mm (10 pcs)
2	083926	Trocar needle, 1.5 mm x 200 mm (10 pcs)
2	089001	Obturator for 1.5 mm needle x 80 mm (10 pcs)
2	089003	Obturator for 1.5 mm needle x 100 mm (10 pcs)
2	089005	Obturator for 1.5 mm needle x 120 mm (10 pcs)
2	089007	Obturator for 1.5 mm needle x 140 mm (10 pcs)
2	089009	Obturator for 1.5 mm needle x 160 mm (10 pcs)
2	089011	Obturator for 1.5 mm needle x 180 mm (10 pcs)
2	089013	Obturator for 1.5 mm needle x 200 mm (10 pcs)
1	045004	Torque screwdriver, 1.27 mm
4	089025	Needle stopper 1.5 mm (10 pcs)

#### Interstitial needle basic set 1.9 mm, part # 083040

Quantity	Part number	Description
2	083050	Trocar needle, 1.9 mm x 80 mm (10 pcs)
2	083052	Trocar needle, 1.9 mm x 100 mm (10 pcs)
2	083054	Trocar needle, 1.9 mm x 120 mm (10 pcs)
2	083056	Trocar needle, 1.9 mm x 140 mm (10 pcs)
2	083058	Trocar needle, 1.9 mm x 160 mm (10 pcs)
2	083060	Trocar needle, 1.9 mm x 180 mm (10 pcs)
2	083062	Trocar needle, 1.9 mm x 200 mm (10 pcs)
2	083250	Obturator for 1.9 mm needle x 80 mm (10 pcs)
2	083252	Obturator for 1.9 mm needle x 100 mm (10 pcs)
2	083254	Obturator for 1.9 mm needle x 120 mm (10 pcs)
2	083256	Obturator for 1.9 mm needle x 140 mm (10 pcs)
2	083258	Obturator for 1.9 mm needle x 160 mm (10 pcs)
2	083260	Obturator for 1.9 mm needle x 180 mm (10 pcs)
2	083262	Obturator for 1.9 mm needle x 200 mm (10 pcs)
4	083001	Stainless steel stopper, 1.9 mm needle (10 pcs)
1	045004	Torque screwdriver, 1.27 mm

#### **Optional items**

Part number	Description
083147	Sterilizing caps, 1.9 mm (50 pcs)

### Why stainless steel interstitial needles?

- Designed to maintain their rigidity and sharpness throughout multiple treatments
- Needle tip available in various geometries to adapt to clinical needs

#### Trocar point needles, Ø 1.5 mm

Quantity	Part number	Description
1	083914	Trocar needle, 1.5 mm x 80 mm (10 pcs)
1	083916	Trocar needle, 1.5 mm x 100 mm (10 pcs)
1	083918	Trocar needle, 1.5 mm x 120 mm (10 pcs)
1	083920	Trocar needle, 1.5 mm x 140 mm (10 pcs)
1	083922	Trocar needle, 1.5 mm x 160 mm (10 pcs)
1	083924	Trocar needle, 1.5 mm x 180 mm (10 pcs)
1	083926	Trocar needle, 1.5 mm x 200 mm (10 pcs)

#### Trocar point needles, Ø 1.9 mm

Quantity	Part number	Description
1	083050	Trocar needle, 1.9 mm x 80 mm (10 pcs)
1	083052	Trocar needle, 1.9 mm x 100 mm (10 pcs)
1	083054	Trocar needle, 1.9 mm x 120 mm (10 pcs)
1	083056	Trocar needle, 1.9 mm x 140 mm (10 pcs)
1	083058	Trocar needle, 1.9 mm x 160 mm (10 pcs)
1	083060	Trocar needle, 1.9 mm x 180 mm (10 pcs)
1	083062	Trocar needle, 1.9 mm x 200 mm (10 pcs)
1	083066	Trocar needle, 1.9 mm x 240 mm (10 pcs)
1	083072	Trocar needle, 1.9 mm x 294 mm (10 pcs)

#### Bevel point needles, Ø 1.9 mm

Part number	Description
083045	Bevel needle, 1.9 mm x 200 mm (10 pcs)

#### **Optional items**

Part number	Description
083147	Sterilizing caps, 1.9 mm (50 pcs)

#### **Needles and Flexible Implant Tubes**

Image doesn't show full leaders at end of catheters



#### **Flexible Implant Tubes**

The flexible implant tubes are developed for treatments that require a moldable source path. The flexible implant tubes are equipped with 'leaders' to run the implant tube through a channel in the tissue that is preformed by a leader insertion needle. The flexible implant tubes are available in various configurations: single leader with button end; single leader with blind end; or double leader. They arrive sterilized and ready for immediate clinical use.

#### Note:

- Flexible implant tubes are delivered sterile and are for single use only
- Flexible implant tubes are packed in pouches of six, with six pouches per box
- Buttons are packed in pouches of six with 12 pouches per box
- For Flexitron afterloaders, only flexible implant tubes with length ≤ 400 mm can be used
- $\cdot$  Available only in single leader or double leader
- Buttons are only radio-opaque which is compatible with X-Ray, CT and MR image modalities
- User manual 090.710

\*The insertion needles are not MR safe

#### Order information

Flexible implant tube set, 6F, 30 cm, part # 189400

Quantity	Part number	Description
2	189300 ●	Flexible implant tube, 6F, single leader, 30 cm (box of 36)
2	189298 ●	Flexible implant tube, 6F, double leader, 30 cm (box of 36)
1	189282 •	Radio-opaque button white, 6F (box of 72)
1	189284 •	Radio-opaque button black, 6F (box of 72)
1	189286 ●	Radio-opaque button red, 6F (box of 72)
1	189288 • Radio-opaque button blue, 6F (box of 72)	
1	189290 •	Radio-opaque button green, 6F (box of 72)
1	189367	Cutter flexible implants
1	189437 ●	Leader Insertion needles, 1.5 x 200 mm (box of 72)

#### Optional items

Part number	Description
189300 •	CT/MR flexible implant tube, 6F, single leader, 30 cm (box of 36)
189510 •	Flexible implant tube, 5F, single leader, 30 cm (box of 36)
189508 •	Flexible implant tube, 5F, double leader, 30 cm (box of 36)
189292 •	Radio-opaque button yellow, 6F (box of 72)
189294 •	Radio-opaque button brown, 6F (box of 72)
189472 •	Radio-opaque button white, 5F (box of 72)
189474 •	Radio-opaque button black, 5F (box of 72)
189476 •	Radio-opaque button red, 5F (box of 72)
189478 •	Radio-opaque button blue, 5F (box of 72)
189480 •	Radio-opaque button green, 5F (box of 72)
189482 •	Radio-opaque button yellow, 5F (box of 72)
189484 •	Radio-opaque button brown, 5F (box of 72)
045103	S.S. button, Henschke
045046	Bevel needle, Open End, 1.5 x 200 mm (1 x 10 pcs)
089021	Catheter insertion set, 6F trocar
089023	Catheter insertion set, 6F bevel
594456	Emergency button cutter
089420	X-ray catheter set, 30 cm (1-18)
030100	Push Fit disconnection tool
089348*	Kink protection tube, for 6F flexible
089345*	Kink protection tube, for transfer tube
080026	Applicator adapter 6F (box of 2)

#### Consumables information

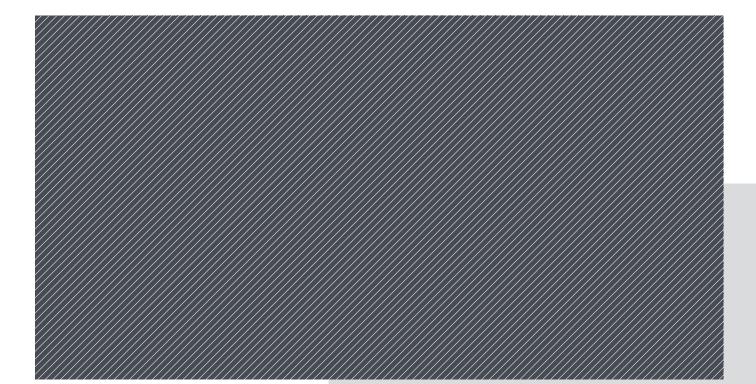
Single use, delivered sterile

\*Minimum order quantity is 50 pcs

## Why flexible implant tubes?

• Easy to use for interstitial treatments (i.e. tongue, breast and soft tissue)

This is an overview of the applicator sets and parts which will no longer be produced after a surtain date.



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Set will not be available anymore after 2020 Only service parts of the applicator will be available until 2023

#### **Utrecht Interstitial CT/MR Applicator**

User manual 777.00077

#### Utrecht Interstitial CT/MR applicator set (4 mm) part # 110270A02

The same set as the below 6 mm set, but with 4 mm intrauterine tubes

#### Utrecht Interstitial CT/MR applicator set (6 mm) part # 110270A01

Part number	Description
189735	Ovoid tube 1
189740	Ovoid tube 2
189739	Intrauterine tube 15°
189745	Intrauterine tube 30°
110240	Interstitial ovoid pair 15 mm, 15°
110241	Interstitial ovoid pair 20 mm, 15°
110242	Interstitial ovoid pair 25 mm, 15°
110243	Interstitial ovoid pair 30 mm, 15°
189714	Insertion tool
110268	Obturator set (set of 5)
189751	Rectal retractor 40 mm
189742	Rectal retractor 30 mm
189741	Fixation nut for rectal retractor
189722	Fixation mechanism
189750	Fixation clip
189930	Spare fixation nuts set (5 pcs)
101012	Sterilization caps (50 pcs)
110267	Cervical stopper
110283	Screwdriver for ovoids and stopper
008033	Plastic screw M5 PPSU (10 x 008033)
189040	Cleaning brush set (2.5 mm)
189043	Cleaning brush set (6.5 mm)

#### **Optional items**

Please note that the optional items dedicated to this applicator will also become legacy products

Part number	Description
110230* •	ProGuide round needle set, 6F x 294 mm (set of 5)
110231 •	ProGuide sharp needle set, 6F x 294 mm (set of 5)
110232* •	Guiding tube for ovoids
189769	Intrauterine tube, d = 6 mm, 45°
110296/298/300	Intrauterine tube, d = 4 mm, 15°/30°/45°
110272	Interstitial ovoid set 25° (15 mm, 20 mm, 25 mm, 30 mm)
101031	Fixation mechanism for ovoid tubes
189566** ●	Smit Sleeves CT/MR (10 pcs, I = 40 mm, d = 9 mm)
110700	Pins for adjustable mechanism (5 pcs)
189894	Spare part set plastic screw M5 PPSU (10 pcs)
189724	Internal fixation mechanism
189727	Clip bolt
189731	Pin
110315	Rectal retractor 30 mm with slot (for intrauterine tubes 4 mm)
110335	Rectal retractor 40 mm with slot (for intrauterine tubes 4 mm)
110395	Cervical stopper for 4 mm
110396	Cervical stopper tool for 4 mm
101015	CT/MR sterilization box
189729	Fixation axle

\*Required for interstitial treatment

\*\*For more options, refer to Optional items section, page 108

Consumables information Single use, delivered sterile



Set will not be available anymore after 2020 Only service parts of the applicator will be available until 2023

#### Fletcher CT/MR Applicator

User manual 777.00287

User manual optional 4mm intrauterine tube 777.00088

#### Fletcher CT/MR applicator set, part # 189730

Part number	Description
189735	Ovoid tube 1
189740	Ovoid tube 2
189739	Intrauterine tube 15°
189745	Intrauterine tube 30°
189783	Ovoid pair 15 mm (half ovoids)
189754	Ovoid pair 20 mm
189755	Ovoid pair 25 mm
189756	Ovoid pair 30 mm
189757	Ovoid pair 35 mm
189758	Ovoid pair 40 mm
189742	Rectal retractor 30 mm
189751	Rectal retractor 40 mm
189741	Fixation nut for rectal retractor
110267	Cervical stopper
189722	Adjustable fixing mechanism
189750	Fixation clip
008033	Plastic screw M5 PPSU (10 x 008033)
110283	Screwdriver for ovoids and stopper
101012	Sterilization caps (50 pcs)

#### Fletcher CT/MR applicator set XS, part # 110216

Part number	Description
189735	Ovoid tube 1
189740	Ovoid tube 2
110296*	Intrauterine tube (4 mm), 15°
110298*	Intrauterine tube (4 mm), 30°
110300*	Intrauterine tube (4 mm), 45°
110540	Ovoid pair 15 mm, R7.5 (micro ovoids)
189783	Ovoid pair 15 mm, R10 (half ovoids)
189754	Ovoid pair 20 mm, R10
189755	Ovoid pair 25 mm, R10
189722	Adjustable fixation mechanism
189750	Fixation clip
101012	Sterilization caps (50 pcs)
110283	Screwdriver titanium for ovoids and stopper
008033	Plastic screw M5 PPSU (10 x 008033)



4 mm IU tube with new stopper

66110

#### **Optional items**

Please note that the optional items dedicated to this applicator will also become legacy products

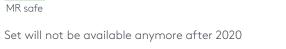
Part number	Description
110296/298/300	Intrauterine tube (4 mm) 15°/30°/45°
189566** •	Smit Sleeves CT/MR Ø 9 mm (box of 10)
189676**	189676 and following Smit Sleeves, I = 20 mm and longer, d = 6 mm (10 pcs)
189769	Intrauterine tube 45° (6 mm)
101031	Ovoid tube fixing mechanism
101015	CT/MR sterilization box
189900	Ovoid set with radius 12.5 mm (25, 30, 35, 40 mm)
189901	Ovoid set with radius 15 mm (30, 35, 40 mm)
110700	Pins for adjustable mechanism (5 pcs)
189930	Spare fixation nuts (5 pcs)
110271	Utrecht Interstitial applicator complimentary set, to expand the use of the Fletcher CT/MR applicator to interstitial treatments
189894	Spare part set plastic screw M5 PPSU (10 pcs)
110315	Rectal retractor 30 mm with slot (for intrauterine tubes 4 mm)
110335	Rectal retractor 40 mm with slot (for intrauterine tubes 4 mm)
189741	Fixation nut for rectal retractor
110395	Cervical stopper for 4 mm
110396	Cervical stopper tool for 4 mm
189729	Fixation axle

Consumables information Single use, delivered sterile

\*The 4 mm IU tubes include a cervical stopper

\*\*For more options, refer to the Optional items section, page 108





Only service parts of the applicator will be available until 2023

#### Standard CT/MR Applicator

User manual 090.613

MR

#### Standard CT/MR applicator set, part # 101020

Part number	Description
101021	Ovoid tube 1
101022	Ovoid tube 2
101023	Intrauterine tube 40 mm
101024	Intrauterine tube 50 mm
101025	Intrauterine tube 60 mm
101026	Ovoid pair 20 mm
101027	Ovoid pair 25 mm
101028	Ovoid pair 30 mm
101029	Rectal retractor 30 mm
101030	Rectal retractor 40 mm
101031	Ovoid tube fixing mechanism
008034	Screwdriver for ovoid and stopper
101012	Sterilizing caps, CT/MR (50 pcs)
008033	Plastic screw M5 PPSU (10 x 008033)

#### **Optional items**

Please note that the optional items dedicated to this applicator will also become legacy products

Part number	Description
101015	CT/MR sterilization box
110302	Intrauterine tube (4 mm), I =50 mm, 40°
189566* ●	Smit Sleeves CT/MR, I = 40 mm, d = 9 mm (box of 10)
189768	Cervical stopper for 110302



\*For more options, refer to the Optional items section, page 108





Set will not be available anymore after 2020 Only service parts of the applicator will be available until 2023

#### Henschke Titanium Applicator

User manual 777.00144

#### Henschke titanium applicator set, part # 110018

Part number	Description
110019	Dual colpostat tube
110435	Intrauterine tube straight
110436	Intrauterine tube, 15°
110437	Intrauterine tube, 30°
110438	Intrauterine tube, 45°
065085	Colpostat cap Ø 25 (pair)
065086	Colpostat cap Ø 30 (pair)
110283	Screwdriver for ovoids and stopper (2 pcs)
110430	Cervical stopper (2 pcs)
008033	Plastic screw M5 PPSU (10 x 008033)

#### Optional items

Please note that the optional items dedicated to this applicator will also become legacy products

Part number	Description
189676 and following* ●	Smit Sleeves CT/MR for Ti intrauterine tube, I = 20 mm and longer, d = 6 mm (box of 10 pcs)
101015	CT/MR sterilization box

C	onsumables information	
	Single use, delivered sterile	

\*For more options, refer to the Optional items section, page 108





Set will not be available anymore after 2020 Only service parts of the applicator will be available until 2023

#### **Cervix Rotterdam Applicator**

User manual 777.00281

#### Cervix Rotterdam applicator set IU-15°, part # 137218

Part number	Description
137235	Right ovoid tube I, IU-15° (ti)
137236	Left ovoid tube III, IU-15° (ti)
137191	Ovoid pair, 20 mm, small
137192	Ovoid pair, 25 mm, medium
137193	Ovoid pair, 30 mm, large
137230	Intrauterine tube IIIII, IU-15°, I = 30 mm, (ti)
137232	Intrauterine tube IIIII, IU-15°, I = 50 mm, (ti)
137234	Intrauterine tube IIIII, IU-15°, I = 70 mm, (ti)
137246	Ovoid tube coupling for 15°, for ovoids only (ti)
137570	Closing caps (25/pack)
137574	Screwdriver for ovoid screws

#### Optional items for 15° set

Please note that the optional items dedicated to this applicator will also become legacy products

Part number	Description
137245	Vaginal cylinder locking pin (ti)
137237	Vaginal cylinder and cap 15°, Ø 30 mm, l = 60 mm
137207	Vaginal cylinder and cap 15°, Ø 37 mm, l = 60 mm
137238	Vaginal cylinder and cap 15°, Ø 40 mm, I = 60 mm
137229	Intrauterine tube IIIII, IU-15°, I = 20 mm, (Ti)
137231	Intrauterine tube IIIII, IU-15°, I = 40 mm, (Ti)
137233	Intrauterine tube IIIII, IU-15°, I = 60 mm, (Ti)

#### Cervix Rotterdam applicator set IU-30°, part # 137206

Part number	Description
137248	Right ovoid tube I, IU-30° (ti)
137249	Left ovoid tube III, IU-30° (ti)
137191	Ovoid pair, Ø 20 mm, small
137192	Ovoid pair, 25 mm, medium
137193	Ovoid pair, 30 mm, large
137251	Intrauterine tube IIIII, IU-30°, I = 30 mm, (ti)
137253	Intrauterine tube IIIII, IU-30°, I = 50 mm, (ti)
137255	Intrauterine tube IIIII, IU-30°, I = 70 mm, (ti)
137256	Ovoid tube coupling for 30°, for ovoids only (ti)
137570	Closing caps (25/pack)
137574	Screwdriver for ovoid screws

#### Optional items for 30° set

Please note that the optional items dedicated to this applicator will also become legacy products

Part number	Description
137245	Vaginal cylinder locking pin (ti)
137299	Vaginal cylinder and cap 30°, Ø 30 mm, I = 60 mm
137257	Vaginal cylinder and cap 30°, Ø 37 mm, l = 60 mm
137239	Vaginal cylinder and cap 30°, Ø 40 mm, I = 60 mm
137250	Intrauterine tube IIIII, IU-30°, I = 20 mm, (Ti)
137252	Intrauterine tube IIIII, IU-30°, I = 40 mm, (Ti)
137254	Intrauterine tube IIIII, IU-30°, I = 60 mm, (Ti)

Consumables information

Single use, delivered sterile

\*For more options, refer to the Optional items section, page 108

#### Cervix Rotterdam applicator set IU-45°, part # 137217

Part number	Description
137219	Right ovoid tube I, IU-45° (ti)
137220	Left ovoid tube III, IU-45° (ti)
137191	Ovoid pair, Ø 20 mm, small
137192	Ovoid pair, 25 mm, medium
137193	Ovoid pair, 30 mm, large
137222	Intrauterine tube IIIII, IU-45°, I = 30 mm, (ti)
137224	Intrauterine tube IIIII, IU-45°, I = 50 mm, (ti)
137226	Intrauterine tube IIIII, IU-45°, I = 70 mm, (ti)
137247	Ovoid tube coupling for 45°, for ovoids only (ti)
137570	Closing caps (25/pack)
137574	Screwdriver for ovoid screws

#### Optional items for 45° set

Please note that the optional items dedicated to this applicator will also become legacy products

Part number	Description
137245	Vaginal cylinder locking pin (ti)
137240	Vaginal cylinder and cap 45°, Ø 30 mm, l = 60 mm
137228	Vaginal cylinder and cap 45°, Ø 37 mm, l = 60 mm
137241	Vaginal cylinder and cap 45°, Ø 40 mm, l = 60 mm
137221	Intrauterine tube IIIII, IU-45°, I = 20 mm, (Ti)
137223	Intrauterine tube IIIII, IU-45°, I = 40 mm, (Ti)
137225	Intrauterine tube IIIII, IU-45°, I = 60 mm, (Ti)

#### Optional items for all Cervix Rotterdam applicators

Please note that the optional items dedicated to this applicator will also become legacy products

Part number	Description
137244	Rectal spacer locking pin (ti)
137243	Rectal spacer, 30 mm wide, 5 mm spacing under ovoid
137242	Rectal spacer, 30 mm wide, behind ovoid
137190	Mini ovoid pair, 15 mm
137577	Spare ovoid screws (set of 5 pcs)
189676 and following* ●	Smit Sleeves CT/MR for Ti intrauterine tube, I = 20 mm and longer, d = 6 mm (box of 10 pcs)
101015	CT/MR sterilization box





Set is not commercially available anymore Only service parts of the applicator will be available until 2021

#### Interstitial Ring CT/MR Applicator

User manual 777.00083

#### Interstitial Ring CT/MR applicator sets (4 mm)\*

Part number	Description
110674	Interstitial Ring applicator set, complete (4 mm)
110330A02	Interstitial Ring applicator set d = 26 mm, 60°(4 mm)
110331A02	Interstitial Ring applicator set d = 30 mm, 60° (4 mm)
110332A02	Interstitial Ring applicator set d = 34 mm, 60° (4 mm)

\*The 4 mm set contains the same part numbers as the 6 mm sets

Interstitial ring CT/MR applicator set, complete (6 mm), part # 110673

Part number	Description
110350	Interstitial ring tube, d = 26 mm, 60° (6 mm)
110351	Interstitial ring tube, d = 30 mm, 60° (6 mm)
110352	Interstitial ring tube, d = 34 mm, 60° (6 mm)
101051	Intrauterine tube, I = 20 mm, 60° (6 mm)
101052	Intrauterine tube, I = 40 mm, 60° (6 mm)
101053	Intrauterine tube, l = 60 mm, 60° (6 mm)
101057	Rectal retractor, 60°
189930	Fixation nuts set (spare, 5 pcs)
101012	Sterilization caps CT/MR (50 pcs)
110268	Obturators (5 pcs)
189714	Insertion tool
189040	Cleaning brush set
189043	Cleaning brush set

#### Interstitial ring CT/MR applicator sets

#### Set, d = 26 mm, 6 mm, 60° (max. 7 needles), part # 110330 A01

Part number	Description
110350	Interstitial ring tube, d = 26 mm, 60°
101051	Intrauterine tube, I = 20 mm, 60° (6 mm)
101052	Intrauterine tube, I = 40 mm, 60° (6 mm)
101053	Intrauterine tube, I = 60 mm, 60° (6 mm)
101057	Rectal retractor, 60°
189930	Fixation nuts set (spare, 5 pcs)
101012	Sterilization caps CT/MR (50 pcs)
110268	Obturators (5 pcs)
189714	Insertion tool
189040	Cleaning brush set
189043	Cleaning brush set

#### Set, d = 30 mm, 6 mm, 60° (max. 9 needles), part # 110331 A01

Part number	Description
110351	Interstitial ring tube, d = 30 mm, 60°
101051	Intrauterine tube, I = 20 mm, 60° (6 mm)
101052	Intrauterine tube, I = 40 mm, 60° (6 mm)
101053	Intrauterine tube, I = 60 mm, 60° (6 mm)
101057	Rectal retractor, 60°
189930	Fixation nuts set (spare), set of 5
101012	Sterilization caps CT/MR (50 pcs)
110268	Obturators, set of 5
189714	Insertion tool
189040	Cleaning brush set
189043	Cleaning brush set

#### Consumables information

Single use, delivered sterile

\*Required for interstitial treatment

\*\*For more options, refer to the Optional items section, page 108

#### Set, d = 34 mm, 6 mm, 60° (max. 9 needles), part # 110332 A01

Part number	Description
110352	Interstitial ring tube, d = 34 mm, 60°
101051	Intrauterine tube, I = 20 mm, 60° (6 mm)
101052	Intrauterine tube, I = 40 mm, 60° (6 mm)
101053	Intrauterine tube, I = 60 mm, 60° (6 mm)
101057	Rectal retractor, 60°
189930	Fixation nuts set (spare), set of 5
101012	Sterilization caps CT/MR (50 pcs)
110268	Obturators, set of 5
189714	Insertion tool
189040	Cleaning brush set (2.5 mm)
189043	Cleaning brush set (6.5 mm)

#### Optional items for all sets

Please note that the optional items dedicated to this applicator will also become legacy products

Part number	Description
110230* •	ProGuide round needle set, 6F x 294 mm (set of 5, single packed, delivered sterile)
110231* •	ProGuide sharp needle set, 6F x 294 mm (set of 5, single packed, delivered sterile)
110273* ●	Guiding tube for ring set for interstitial ring (set of 5, single packed, delivered sterile)
110350	Interstitial ring tube, d = 26 mm, 60°
110351	Interstitial ring tube, d = 30 mm, 60°
110352	Interstitial ring tube, d = 34 mm, 60°
189566** ●	Smit Sleeves CT/MR for 6 mm intrauterine tube, I = 40 mm, d = 9 mm, open ended (box of 10)
189676 and following** ●	Smit Sleeves CT/MR for 4 mm intrauterine tube, I = 20 mm and longer, d = 6 mm (box of 10)
101054	Perineal bar
110305/306/307	Intrauterine tube, d = 4 mm, 60°, l = 20/40/60 mm
110290	MR line marker set
101015	CT/MR sterilization box





Set is not commercially available anymore Only service parts of the applicator will be available until 2021

#### Vienna Ring CT/MR Applicator

User manual 090.720

Vienna Ring CT/MR applicator set 26 mm, 60°, part # 189699

Part number	Description	
189713	Vienna Ring CT/MR tube, 60° (for 7 needles)	
101051	Intrauterine tube, I = 20 mm, 60°	
101052	Intrauterine tube, I = 40 mm, 60°	
101053	Intrauterine tube, I = 60 mm, 60°	
101057	Rectal retractor, 60°	
189930	Set of 5 fixing nuts (spare)	
101012	Sterilization caps, CT/MR (50 pcs)	
110720	Needle fixation tool, d = 26 mm	
189040	Cleaning brush set (2.5 mm)	
189043	Cleaning brush set (6.5 mm)	

Vienna Ring CT/MR applicator set 30 mm, 60°, part # 189792

Part number	Description
189799	Vienna Ring CT/MR tube, 60° (for 9 needles)
101051	Intrauterine tube, I = 20 mm, 60°
101052	Intrauterine tube, I = 40 mm, 60°
101053	Intrauterine tube, I = 60 mm, 60°
101057	Rectal retractor, 60°
189930	Set of 5 fixing nuts (spare)
101012	Sterilization caps, CT/MR (50 pcs)
110721	Needle fixation tool, d = 30 mm
189040	Cleaning brush set (2.5 mm)
189043	Cleaning brush set (6.5 mm)

Consumables information Single use, delivered sterile Vienna Ring CT/MR applicator set 34 mm, 60°, part # 189569

Part number	Description
189567	Vienna Ring CT/MR tube, 60° (for 9 needles)
101051	Intrauterine tube, I =20 mm, 60°
101052	Intrauterine tube, I = 40 mm, 60°
101053	Intrauterine tube, I = 60 mm, 60°
101057	Rectal retractor, 60°
189930	Set of 5 fixing nuts (spare)
101012	Sterilization caps, CT/MR (50 pcs)
189995	Needle fixation tool, d =34 mm
189040	Cleaning brush set (2.5 mm)
189043	Cleaning brush set (6.5 mm)

#### **Optional items**

Please note that the optional items dedicated to this applicator will also become legacy products

Part number	Description
110720	Needle fixation tool, d = 26 mm
110721	Needle fixation tool, d = 30 mm
189995	Needle fixation tool, d = 34 mm
083252	Obiturator for needle, I = 100 mm
089636	Handle for obturator
189566* ●	Smit Sleeves CT/MR, I = 40 mm, d = 9 mm (box of 10)
101054	Perineal bar
110305/306/307	Intrauterine tube, d = 4 mm, 60°, l = 20/40/60 mm
101015	CT/MR sterilization box

\*For more options, refer to the Optional items section, page 108





Set is not commercially available anymore Only service parts of the applicator will be available until 2023

#### Venezia Version-00 parts

User manual 777.00493-05

With the introduction of version 01 these part numbers will only be available until a certain date. This is according to the registration of the part numbers in place for each region.

The countries where the new revision is not yet registered will be supplied with this part numbers.

#### Advanced Gynecological Applicator Venezia

Part number	Description
126024	Fixation element
126025	Fixation clip
126026	Perineal template dorsal 0°
126027	Perineal template dorsal 12°
126028	Perineal template ventral 0°
126033	Perineal bar

# Quality Assurance Tools



## Content

Source Position Check Ruler Source Position Simulator

104/105

#### CT/MR applicator clamp

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Patient Belt Coupling (PBC)

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#### Source Position Check Ruler

The Source Position Check Ruler is designed for verification of the correct treatment position of the sources and check cable, and of the length of each of the transfer tubes. It can be used with either the mechanical indicator or GAFchromic<sup>™</sup> filmstrip\*, a method that enables instant logging of the result of the measurement.

The Source Position Check Ruler has embedded markers that allow multiple measurements and serve as reference to validate correct positioning of the GAFchromic filmstrip. The films are transparent for easy digitizing or scanning, and are self-developing.

#### Note:

- · User manual for Flexitron: 777.00110
- · User manual for microSelectron: 090.689

#### Order information

#### Source Position Check Ruler for Flexitron

Part number	Description
136196	3-channel Source Position Check Ruler

\*It is recommended to store GAFchromic film in the dark until use. GAFchromic film is only for use with the microSelectron afterloader.

#### Flexitron adaptor overview

Part number	Source Position Check Ruler adapter set to connect	Transfer tube part number
137040	Gynecological titanium transfer tubes	137063
177041	5F catheter transfer tubes (old versions— compatible to transfer tube sets delivered before May 2014)	137090/137091 137092/137093
137041	6F catheter transfer tubes (old versions— compatible to transfer tube sets delivered before May 2014)	137094/137095 137096/137097
137042	5F catheter transfer tubes	137090/137091 137092/137093
137043	6F catheter transfer tubes	137094/137095 137096/137097
137182	Gynecological stainless steel transfer tubes (default included with SPCR)	111680
137180	Gynecological CT/MR transfer tubes	111650
137818	Metal needles transfer tubes	111805/111816 111827/111838

#### Source Position Check Ruler for microSelectron

Part number	Description
096035	Source Position Check Ruler

#### Optional items for microSelectron

Part number	Description
096271A10	GAFchromic filmstrip (box of 10)
073250	Audio radiographic check device
080034	Positioning ROD check ruler



#### Source Position Simulator

The Source Position Simulator is designed to determine the distal length of an applicator.

#### Note:

- · User manual for Flexitron: 777.00264
- · User manual for microSelectron: 090.682ENG

#### Order information

Source Position Simulator for Flexitron:

Part number	Description
138200	Source Position Simulator set for Flexitron
138202	Source Position Simulator set for Flexitron with x-ray markers

#### Optional items for Flexitron

Part number	Description
138225	Standard slider with dummy cable
138227	Optional slider with simulator wire with x-ray markers

#### Source Position Simulator for microSelectron

Part number	Description
111094	Source Position Simulator set
111096	Source Position Simulator set with x-ray markers

#### Optional items for microSelectron

Part number	Description
111268	Standard slider with dummy cable
111275	Optional slider with simulator wire with x-ray markers

#### **Quality Assurance Tools**



#### **CT/MR Applicator Clamp**

The CT/MR applicator clamp is designed for fixation of applicators to a patient treatment table or patient bed. It is compatible with use of CT and MR imaging. With one knob, all variables such as length, rotation, sloping and angle of the inserted applicator can be fixed. For fixation of the applicator itself, various inserts are provided that allow fitting with all available Elekta Brachytherapy applicators within the clamp. The entire assembly requires no oil, and can easily be taken apart for cleaning. The CT/ MR applicator clamp can be attached to a base plate for immobilization in any hospital bed or the clamp can be mounted on an axle in order to attach the clamp to a hospital bed, IBU table etc.

#### Benefits:

- $\cdot$  Can be used with various imaging modalities
- $\cdot$  Accurate applicator fixation
- $\cdot$  Easy to use
- $\cdot$  The baseplate is x-ray translucent
- $\cdot$  All clamp components can be sterilized using steam sterilization

#### Note:

· User manual: 090.716

#### Order information

CT/MR applicator clamp with base plate, # 189932

Part number	Description
189933	Fixation part (1 pcs)
189934	Base plate (1 pcs)
189981	Inserts Ø 3 mm (titanium coloured) (4 pcs)
189980	Inserts Ø 6 mm (white coloured) (4 pcs)
189982	Inserts Ø 12 mm (black coloured) (4 pcs)

#### CT/MR applicator clamp with axle, #189931

Part number	Description
189933	Fixation part (1 pcs)
189934	Axle (1 pcs)
189981	Inserts Ø 3 mm (titanium coloured) (4 pcs)
189980	Inserts Ø 6 mm (white coloured) (4 pcs)
189982	Inserts Ø 12 mm (black coloured) (4 pcs)

#### **Optional items**

Part number	Description
189981	Set of 4 inserts Ø 3 mm (titanium colored)
189980	Set of 4 inserts Ø 6 mm (white colored)
189982	Set of 4 inserts Ø 12 mm (black colored)
189951	Axle knob support (small)
189952	Spare applicator fixation knob (small)
189957	Fixation knob
189958	Axle knob support (large)
189959	Spare clamp fixation knob (large)
110778	Applicator clamp adapter set for VCMC



## Patient Belt Coupling (PBC)\*

PBC sets, featuring the quick-release coupling device, are designed to support a user-friendly fixation of transfer tubes and applicator components. The quick-release coupling enables a patient to be connected and disconnected from the afterloader in a quick and easy way. Dedicated transfer tubes are connected to separate parts of the quick-release coupling and similarly to the patient and afterloader. The patient connector part of the quick-release coupling is fixed in position using a patient belt. With all transfer tubes in place on the patient and on the afterloader, the separate parts of the quick-release coupling are connected or disconnected by a simple twist. Complete PBC sets for various types of applicators are available.

\* Available only for use with microSelectron PDR afterloader

#### Note:

· Manual number: 090.653

#### Order information

PBC set for needles and flexibles, part # 111379

Part number	Description
030299	Patient waist belt set
111440	Coupling transfer tube set for needles (1-18)
111480	Coupling transfer tube set 6F flexibles (1-18)
079087	Quick-release coupling set
111420	Coupling transfer tube set (1-18)

PBC set for gynecologic applicators stainless steel, part # 111380

Part number	Description
111421	Coupling transfer tube no. 1
111422	Coupling transfer tube no. 2
111423	Coupling transfer tube no. 3
079087	Quick-release coupling set
111381	Gynecologic transfer tube, ch 1
111382	Gynecologic transfer tube, ch 2
111383	Gynecologic transfer tube, ch 3

#### PBC set for interstitial needles, part # 111386

Part number	Description
030299	Patient waist belt set
111440	Coupling transfer tube set for needles (1-18)
079087	Quick-release coupling set
111420	Coupling transfer tube set

#### Optional items for PBC sets

Part number	Description
030100	Push fit disconnection tool*
111381	GYN PBC transfer tube keyed for channel 1
111382	GYN PBC transfer tube keyed for channel 2
111383	GYN PBC transfer tube keyed for channel 3
079087	Quick-release coupling set

\* For use with flexible implant tubes only

#### Coupling transfer tube sets

Part number	Description
111420	Coupling transfer tube set (channel 1-18)
111520	Coupling transfer tube set (channel 19-30)
111440	Coupling transfer tube set for needles (channel 1-18)
111535	Coupling transfer tube set for needles (channel 19-30)
111500	Coupling transfer tube set for 4F flexible implant tubes (channel 1-18)
111580	Coupling transfer tube set for 4F flexible implant tubes (channel 19-30)
111460	Coupling transfer tube set for 5F flexible implant tubes (channel 1-18)
111550	Coupling transfer tube set for 5F flexible implant tubes (channel 19-30)
111480	Coupling transfer tube set for 6F flexible implant tubes (channel 1-18)
111565	Coupling transfer tube set for 6F flexible implant tubes (channels 19-30)

# **Optional items**



Optional items are categorized by part number (low to high).

Not all optional items are included in the overview. If you cannot find a specific item or if you have any questions about optional items, please contact your Elekta representative.

Consumables information Single use, delivered sterile Single use, delivered non-sterile

## Torque screwdriver 2.5 mm

**Perineal bar** 

Part number

Perineal bar

Part number

084072

084008

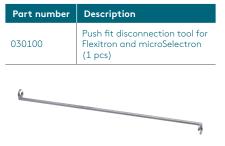


Description

Perineal bar for

vaginal applicator (1 pcs)

## Push fit disconnection tool



## Cervical stopper

Part number	Description
084009	Cervical stopper for vaginal applicator (1 pcs)



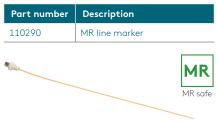
## Sterilizing caps

Part number	Description
084158	Sterilizing caps, 3.2 mm (50 pcs)

## Torque screwdriver, 1.27 mm



## MR line marker



### Note:

Delivered non-sterile and not filled with fluid
 User manual 777.00081

## Fixing mechanism retractor

Part number	Description
086011	Fixing mechanism_retractor (1 pcs)



Description

Perineal bar for the ring applicator ( 1pcs)

## Kink protection tubes

Part number	Description
089345	Kink protection tube for transfer tube
089347	Kink protection tube, 5F
089348	Kink protection tube, 6F



## Sterilization caps CT/MR

Part number	Description
101012	Sterilization caps CT/MR (50 pcs)





Handle for obturator	
----------------------	--

Part number	Description
089636	Handle for obturator (1 pcs)



## **Perineal bar**

Part number	Description
101054	Perineal bar for CT/MR ring applicators (1 pcs)





## Leader insertion needles

Part number	Description
089700	Leader insertion needle, 1.5 x 120 mm (1 pcs)
089701	Leader insertion needle, 1.5 x 160 mm (1 pcs)
089702	Leader insertion needle, 1.5 x 200 mm (6 pcs)



## Needle fixation tool

Part number	Description
110720	Needle fixation tool (1 pcs)



## Optional items

## Intrauterine tubes

Part number	Description
152005	Intrauterine Tube 0 mm
152006	Interstitial Tube
152007	Intrauterine Tube 30 mm 15°
152008	Intrauterine Tube 40 mm 15°
152009	Intrauterine Tube 50 mm 15°
152010	Intrauterine Tube 60 mm 15°
152011	Intrauterine Tube 70 mm 15°
152012	Intrauterine Tube 80 mm 15°
152013	Intrauterine Tube 30 mm 30°
152014	Intrauterine Tube 40 mm 30°
152015	Intrauterine Tube 50 mm 30°
152016	Intrauterine Tube 60 mm 30°
152017	Intrauterine Tube 70 mm 30°
152018	Intrauterine Tube 80 mm 30°
152019	Intrauterine Tube 30 mm 45°
152020	Intrauterine Tube 40 mm 45°
152021	Intrauterine Tube 50 mm 45°
152022	Intrauterine Tube 60 mm 45°
152023	Intrauterine Tube 70 mm 45°
152024	Intrauterine Tube 80 mm 45°

Contraction of the

## Ovoid tubes

Part number	Description
152001	Ovoid Tube 1
152002	Ovoid Tube 2
152003	Ovoid Tube 1 - Interstitial Ovoid 13 mm
152004	Ovoid Tube 2 - Interstitial Ovoid 13 mm



## **Rectal Retractor**

Part number	Description
152037	Rectal Retractor 20 mm
152038	Rectal Retractor 30 mm
152039	Rectal Retractor 40 mm



## Spreading Clip

Part number	Description
152040	Spreading Clip



## Ovoid pairs

Part number	Description
152025	Interstitial Ovoid Pair 15 mm
152026	Interstitial Ovoid Pair 20 mm
152027	Interstitial Ovoid Pair 25 mm
152028	Interstitial Ovoid Pair 30 mm
152029	Interstitial Ovoid Pair 35 mm
152030	Interstitial Ovoid Pair 40 mm



## Cleaning brush

Part number	Description
189040	Cleaning brush Ø 2.5 mm x 250 mm (set of 3)
189043	Cleaning brush Ø 6.5 mm x 100 mm (set of 3)



## Tubes locking clip

Part number	Description
152032	Tubes locking clip



## Intrauterine tubes

Part number	Description
126013	Intrauterine tube, 0 mm
126014	Intrauterine tube, 30 mm, 30°
126015	Intrauterine tube, 40 mm, 30°
126016	Intrauterine tube, 50 mm, 30°
126017	Intrauterine tube, 60 mm, 30°
126018	Intrauterine tube, 70 mm, 30°
126019	Intrauterine tube, 30 mm, 15°
126020	Intrauterine tube, 40 mm, 15°
126021	Intrauterine tube, 50 mm, 15°
126022	Intrauterine tube, 60 mm, 15°
126023	Intrauterine tube, 70 mm, 15°

## Interstitial lunar ovoid tubes

Part number	Description
126001	Interstitial lunar ovoid tube 22 mm 60° right
126002	Interstitial lunar ovoid tube 22 mm 60° left
126003	Interstitial lunar ovoid tube 26 mm 60° right
126004	Interstitial lunar ovoid tube 26 mm 60° left
126005	Interstitial lunar ovoid tube 30 mm 60° right
126006	Interstitial lunar ovoid tube 30 mm 60° left

## Vaginal caps

Part number	Description
126007	Vaginal cap 22 mm right
126008	Vaginal cap 22 mm left
126009	Vaginal cap 26 mm right
126010	Vaginal cap 26 mm left
126011	Vaginal cap 30 mm right
126012	Vaginal cap 30 mm left



## **Fixation clip**

Insertion toolPart numberDetection

189714

Part number	Description
126201	Fixation clip



Part number	Description
137290	Needle lock tool



Description

## 

## Perineal bar

Part number	Description
126205	Perineal bar (1 pcs)



**Fixation element** 

Part number

126200

Part number	Description
126206	Interstitial lever





Description

Insertion tool (1 pcs)



## Perineal template dorsal

Part number	Description
126202	Perineal template dorsal 0°
126203	Perineal template dorsal 12°



## Perineal template ventral

Part number	Description
126204	Perineal template ventral 0° (1 pcs)



## **Optional items**

## **Cervical stopper**

Part number

Part number

137286/ 137287/parts

129004

Part number	Description
110954	Cervical stopper for Fletcher CT/MR shielded

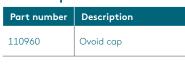


Number tag for guiding tubes

Description

Number tag for guiding tubes (4 pcs x 5 pouches)

## Ovoid cap





## **Guiding tubes**

129001	Guiding tubes interstitial
	(lunar) ovoid (5 pcs)
129002	Guiding tubes for vaginal cap/ interstitial tube (5 pcs)
	-
	•

## Flange molding cutter

Part number	Description	
189316	Flange molding cutter (1 pcs)	

## Bracelet for guiding tubes

Part number	Description
129003	Bracelet for guiding tubes (5 pcs)



## **Fixation screws**

Part number	Description
110771	Fixation screws (5 pcs)



## Flange molding tool

Part number	Description
189320	Flange molding tool (1 pcs)



Lock insert set for plastic needles

Description

Lock insert set for plastic needles (20 pcs)

## and a

## Cutter flexible implants

Part number	Description
189367	Cutter flexible implants (1 pcs)





## Smit Sleeve, $\emptyset$ 9 mm—for use with 6 mm intrauterine tubes

Part number (box of 10)	Part number (box of 3)	Description
189566 ●	110599 ●	Smit sleeve, 40 mm



The use of Smit Sleeves slightly dilates the cervix, facilitating reinsertion of the intrauterine tube for follow-up fractions. It acts as a cervical stopper and provides tissue spacing to reduce mucosal dose. The soft material of the Smit Sleeve enables insertions up to 28 days.

### Note:

Delivered sterile, single packed and for single use
 User manual 090.712

 $\cdot$  Can remain in place up to 28 days



## Smit Sleeve, $\emptyset$ 6 mm—for use with 4 mm intrauterine tubes

Part	Part	Description
number (box of 10)	number (box of 3)	
189676 •	110593 ●	Smit sleeve, I = 20 mm
189677 •	110594 ●	Smit sleeve, I = 40 mm
189679 ●	110595 ●	Smit sleeve, l = 60 mm
189681 ●	110596 ●	Smit sleeve, I = 70 mm
189682 ●	110597 ●	Smit sleeve, I = 80 mm
189683 ●	110598 ●	Smit sleeve, I = 100 mm





## Perineal bar set

Part number	Description
110773	Perineal bar set for vaginal CT/MR multi channel



## Applicator clamp adapter

Part number	Description
110778	Applicator clamp adapter
T	

## Catheter with collar

Part number	Description	
110800	Catheter with collar	

## Li-ion battery pack

Part number	Description
417018	Li-ion battery pack (1 pcs)



## Emergency button cutter





Part number	Description
189996	Titanium needle stopper set (1 pcs)



## Battery charge station

Part number	Description
417006	Battery charge station (1 pcs)



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## X-ray, CT and MRI Markers for Flexitron

		use of a specific applicator with your	X-ray ma	irker set						X-ray catheter
	be selected with this table to connect that applicato	. If no crossmatch is indicated in this table, Ir and afterloader.	CT/MR GYN	SS GYN	Ti GYN	X-ray ca	theter set 3	60 cm		set 40 cm
		For channel:	1-3-5	1-3-5	1-3-5	1-9	10-18	1-18	19-30	3-11
		Part number:	110400	110570	137070	089082	089083	089420	189850	137089
Bodysite	Part number	Description								
Gynecology	084450	Adjustable cervix applicator		×						
Gynecology	137206/217/218	Cervix Rotterdam applicator			×					
Gynecology	189730	Fletcher CT/MR applicator	x							
Gynecology	110980/110950	Fletcher CT/MR shielded applicator	x							
Gynecology	085230/260	Fletcher Williamson applicator		x						
Gynecology	110018	Henschke titanium applicator		×						
Gynecology	110330/331/332 A01/02	Interstitial ring CT/MR applicator	x							
Gynecology	085210	Miami vaginal applicator		x		x				
Gynecology	084050	Ring applicator		×						
Gynecology	101035/060/061/062	Ring CT/MR applicator	x							
Gynecology	084434	Rotte endometrial applicator		×						
Gynecology	084320	Shielded cylindrical applicator		x						
Gynecology	101020	Standard CT/MR applicator	x							
Gynecology	137400	TI vaginal cylinder applicator			x					
Gynecology	110270 A01/02	Utrecht interstitial CT/MR applicator	x							
Gynecology	084350	Vaginal applicator		x						
Gynecology	101001	Vaginal CT/MR applicator	x	~						
Gynecology	110750	Vaginal CT/MR multi channel applicator	x							
Gynecology	189018	Vaginal mold applicator	~	x						
				~						
Gynecology	not applicable	Advanced Gynecological Applicator Venezia	x							
Gynecology	189569/699/792	Vienna ring CT/MR applicator	×			×	x	×		
Breast	110518	Breast CT/MR applicator	Dependin	ig on use of	OncoSmart	catheters c	or type of ne	edles		
Breast	189006	Kuske breast applicator				×	×	x	×	
Breast	103111	Oncosmart introduction								
Prostate, rectum and bladder	110564/565/566/567	Luneray applicator				×			×	×
Prostate, rectum and bladder	110224	Intracavitary mold applicator								×
Prostate, rectum and bladder	083570/571,089055/056	MUPIT applicator				×	x	x	×	
Prostate, rectum and bladder	189069	Prostate stepper template 5F				x	x	x	x	
Prostate, rectum and bladder	189070	Prostate stepper template 6F				x	x	x	x	
Skin	089095	Freiburg Flap applicator				×	×	×	×	
Skin	085040	Leipzig applicator								
Skin	110820	Valencia skin applicator								
Head and Neck	045410	Pipard tongue template				×				
Head and Neck	089068	Rotterdam nasopharyngeal mold						x		
Needles	various	Stainless steel needles (Interstitial/Trocar point/Bevel point )				x	x	x	x	
Needles	various	ProGuide round/sharp needle 5Fx240 mm				x	x	x	x	
Needles	various	ProGuide round/sharp needle 6Fx200 mm								
Needles	various	ProGuide round/sharp needle 6Fx240 mm								
Needles	various	ProGuide round/sharp needle 6Fx294 mm								
Flexible implant tubes	various	Flexible implant tubes, 5F/6F, 30 cm				x	x	x	x	

Note: markers for bronchus and esophagus applicators are not included on this page as they are included in the applicator set

1-9 1	10-18 089090	0 cm 19-30 189851	metal, 6 markers	ray catheter set 50 cm metal, 6 metal, 12 metal markers markers markers									F catheters			MR line
					markers	markers	black, 12 markers	black, 18 markers	yellow, 6 markers	yellow, 12 markers	yellow, 18 markers	100 mm	200 mm	300 mm	400 mm	marker set
089089 0	089090	189851														
			110285	189691	189034	110286	189692	189036	110287	189693	189039	110610	110611	110612	110613	110290
																×
																×
×	x								x	x	x					×
																×
																×
×	x								x	x	x					×
×	x								x	x	×					x
×	x									x	x					x
																×
	I									1						1
					x			x			x	x	×	x	x	
×	x	x														
×	×															
						x	x	x								
			×	×	×											
						x	x	x								
			×	x	×											
						x	x	x								
x	x	x							x	x	x					
												x	×	x	x	

## Transfer tubes for Flexitron

The appropriate transfer	tube set to connect a specific an	nlicator to your afterloader can be selected with this	Transfer tub	e set for GYN		Transfer		
		plicator to your afterloader can be selected with this possible to connect that applicator and afterloader.	CT/MR applicators	Stainless steel applicators	Titanium applicators	tube set for Skin	Transfer	
		For channel:	1-3-5	1-3-5	1-2-3	5	1-10	
		Part number:	111650	111680	137063	111683	111805	
Bodysite	Part number	Description						
Gynecology	084450	Adjustable cervix applicator		x				Γ
Gynecology	137206/217/218	Cervix Rotterdam applicator			x			T
Gynecology	189730	Fletcher CT/MR applicator	x					
Gynecology	110980/110950	Fletcher CT/MR shielded applicator						T
Gynecology	085230/260	Fletcher Williamson applicator		x				
Gynecology	110018	Henschke titanium applicator		x				T
Gynecology	110330/331/332 A01/02	Interstitial ring CT/MR applicator	x					
Gynecology	085210	Miami vaginal applicator		x			×	F
Gynecology	084050	Ring applicator		x				F
Gynecology	101035/060/061/062	Ring CT/MR applicator	x					T
Gynecology	084434	Rotte endometrial applicator		x				t
Gynecology	084320	Shielded cylindrical applicator		x				F
Gynecology	101020	Standard CT/MR applicator	x					F
Gynecology	137400	Ti vaginal cylinder applicator			x			Γ
Gynecology	110270 A01/02	Utrecht interstitial CT/MR applicator	x					F
Gynecology	084350	Vaginal applicator		x				Γ
Gynecology	101001	Vaginal CT/MR applicator	x					
Gynecology	110750	Vaginal CT/MR multi channel applicator	x					T
Gynecology	189018	Vaginal mold applicator		x				T
Gynecology	not applicable	Advanced Gynecological Applicator Venezia	x					Γ
Gynecology	189569/699/792	Vienna ring CT/MR applicator	x				×	
Breast	110518	Breast CT/MR applicator	Depending or	n use of OncoSn	nart catheters o	or type of nee	edles	
Breast	189006	Kuske breast applicator						
Breast	various	OncoSmart catheter						
Prostate, rectum and bladder	110564/565/566/567	Luneray applicator						
Prostate, rectum and bladder	110224	Intracavitary mold applicator						
Prostate, rectum and bladder	083570/571, 089055/056	MUPIT applicator					x	
Prostate, rectum and bladder	137280	Martinez prostate template						
Prostate, rectum and bladder	189069	Prostate stepper template 5F	Depending or	n use of type of	needles			
Prostate, rectum and bladder	189070	Prostate stepper template 6F						
Skin	089095	Freiburg Flap applicator						
Skin	085040	Leipzig applicator		x		x		
Skin	110820	Valencia skin applicator		x		x		
Head and Neck	045410	Pipard tongue template	Depending or	n use of flexible	implants			_
Head and Neck	089068	Rotterdam nasopharyngeal Mold						
Needles	various	Stainless steel needles (Interstitial/Trocar point/ Bevel point )					x	
Needles	various	ProGuide needles 5F						
Needles	various	ProGuide needles, 6F						
Flexible implant tubes	various	Flexible implant tubes 5F						
Flexible implant tubes	various	Flexible implant tubes 6F						

Note: bronchus and esophagus applicator sets include adapters to insert the applicator directly in the indexer

be set for	r metal neec	lles	Transfer t	ube set 4F			Transfer t	ube set 5F			Transfer t	ube set 6F		
L1-20	21-30	31-40	1-10	11-20	21-30	31-40	1-10	11-20	21-30	31-40	1-10	11-20	21-30	31-40
11816	111827	111838	111850	111861	111872	111883	137090	137091	137092	137093	137094	137095	137096	137097
											×	×		
											×	×		
											×	×		
											×	×		
x														
											~	~	~	
			x	x	x	x					X	X	×	x
			~	^	^	^								
											×	×	×	×
x														
		1			1									
											×	×	×	×
			1		1			1	1	1				
											×			
x	x	x												
							x	×	×	×				
											x	x	×	x
							x	×	×	×				
											x	x	×	×
		L	L	<u> </u>	L						· · · · · · · · · · · · · · · · · · ·			

## X-ray, CT and MRI Markers for microSelectron

The appropriate a	x-ray and CT-markers for u	use of a specific applicator with your	X-ray cat	theter set		GYN	X-ray catheter			
afterloader can b		. If no crossmatch is indicated in this table,	Standard GYN	USA GYN	CT/MR GYN	x-ray marker set, 300 mm	set, Norman Simon	X-ray cat	theter set 3	0 cm
		For channel:				1-3-5	1-9	1-9	10-18	1-18
	1	Part number:	085075	084880	101065	137070	089096	089082	089083	089420
Bodysite	Part number	Description			1				1	
Gynecology	084450	Adjustable cervix applicator	×	×	+	1	1	+		
Gynecology	089079	Basic Norman Simon applicator		1	+	+	×	+		
Gynecology	137206/217/218	Cervix Rotterdam applicator		+	+	×	+	+		
Gynecology	189730	Fletcher CT/MR applicator			x	+	+	+		<u> </u>
Gynecology	110980/110950	Fletcher CT/MR shielded applicator	+	+	x	+	+	+		
Gynecology	085230/260	Fletcher Williamson applicator	x	×	+	+	+	+	+	
Gynecology	110018	Henschke titanium applicator	x	x	+	+	+	+		
Gynecology	110330/331/332 A01/02	Interstitial ring CT/MR applicator	+	+	x	-	+	+	'	
Gynecology	085210	Miami vaginal applicator	x	x	+	+	+	x		x
Gynecology	084050	Ring applicator	x		+	+	+		'	
Gynecology	101035/060/061/062	Ring CT/MR applicator		+	×	+	+	+		++
Gynecology	084434	Rotte endometrial applicator	x	x	-	+				+
Gynecology	084320				+	+		+	'	+
, 0,	101020	Shielded cylindrical applicator	×	×	+	+	+		'	
Gynecology		Standard CT/MR applicator			X					++
Gynecology	137400	TI vaginal cylinder applicator			+	x			'	++
Gynecology	110270 A01/02	Utrecht interstitial CT/MR applicator			×					
Gynecology	084350	Vaginal applicator	x	×		+			'	
Gynecology	101001	Vaginal CT/MR applicator			×				'	
Gynecology	110750	Vaginal CT/MR multi channel applicator			×				'	
Gynecology	189018	Vaginal mold applicator	x	×					'	
Gynecology	not applicable	Advanced Gynecological Applicator Venezia			×					<u> </u>
Gynecology	189569/699/792	Vienna ring CT/MR applicator			x			x	x	x
Breast	110518	Breast CT/MR applicator	Depending	j on use of (	OncoSmart	t catheters or	or type of need			
Breast	189006	Kuske breast applicator						x	×	x
Breast	various	Oncosmart catheter								
Prostate, rectum and bladder	110564/565/566/567	Luneray applicator						×	×	
Prostate, rectum and bladder	189011	Intracavitary mold applicator				<b></b>				
Prostate, rectum and bladder	083570/571, 089055/056	MUPIT applicator						×	×	x
Prostate, rectum and bladder	189069	Prostate stepper template 5F						×	×	x
Prostate, rectum and bladder	189070	Prostate stepper template 6F					<b></b>	×	×	x
Skin	089095	Freiburg Flap applicator						x	x	x
Skin	085040	Leipzig applicator								
Skin	189701	Valencia skin applicator								
Head and Neck	045410	Pipard tongue template						x		
Head and Neck	089068	Rotterdam nasopharyngeal mold							,	x
Needles	various	Stainless steel needles (Interstitial/Trocar point/Bevel point )						x	x	x
Needles	various	ProGuide round/sharp needle 5Fx240 mm						x	×	x
Needles	various	ProGuide round/sharp needle 6Fx200 mm						x	x	x
Needles	various	ProGuide round/sharp needle 6Fx240 mm						x	×	x
Needles	various	ProGuide round/sharp needle 6Fx294 mm								
Flexible implant tubes	various	Flexible implant tubes, 5F/6F, 30 cm						x	x	x

Note: markers for bronchus and esophagus applicators are not included on this page as they are included in the applicator set

	X-ray					CT marke	r set 200 mr	n	CT marke	r set 240 mr	n	CT marker	r set 294 mr	n	
	X-ray catheter set 40 cm	X-ray cat	heter set 5:	0 cm	X-ray catheter 100 cm	metal, 6 markers	metal, 12 markers	metal, 18 markers	black, 6 markers	black, 12 markers	black, 18 markers	yellow, 6 markers	yellow, 12 markers	yellow, 18 markers	MR line marker set
19-30	3-11	1-9	10-18	19-30	1										
89850	137089	089089	089090	189851	089401	110285	189691	189034	110286	189692	189036	110287	189693	189039	110290
															×
															×
		x	x									×	x	x	×
															x
															×
		x	x									×	×	x	×
															×
		×	x									×	×	×	×
		X	x									×	X	x	x
x															
								x			x			x	
x	×	x	x	x					x	x	×	×			
	x	×	×												
~															
×															
x									x	×	×				
×						×	×	×							
х															
x															
x									×	×	×				
x						x	x	×							
х		~							x	x	×			~	
		x	x	x								×	x	x	
×															

			Transfer tube	set for GYN		1
		cted to connect a specific applicator to your afterloader. If no nect that applicator and afterloader.	Stainless steel applicators	CT/MR applicators	Titanium applicators	1
		For channel:	1-3	1-3	1-2-3	
		Part number:	111001	111006	111100	
Bodysite	Part number	Description				
Gynecology	084450	Adjustable cervix applicator	x			1
Gynecology	089079	Basic Norman Simon applicator				1
Gynecology	137206/217/218	Cervix rotterdam applicator			x	+
Gynecology	189730	Fletcher CT/MR applicator		x		
Gynecology	110980/110950	Fletcher CT/MR shielded applicator		×		1
Gynecology	085230/260	Fletcher Williamson applicator	x			
Gynecology	110018	Henschke titanium applicator	x			
Gynecology	110330/331/332 A01/02	Interstitial ring CT/MR applicator		x		
Gynecology	085210	Miami vaginal applicator	x			
Gynecology	084050	Ring applicator	x			
Gynecology	101035/060/061/062	Ring CT/MR applicator		×		
Gynecology	084434	Rotte endometrial applicator	x			
Gynecology	084320	Shielded cylindrical applicator	x			
Gynecology	101020	Standard CT/MR applicator		×		
Gynecology	137400	Ti vaginal cylinder applicator			x	
Gynecology	110270 A01/02	Utrecht interstitial CT/MR applicator		×		
Gynecology	084350	Vaginal applicator	x			
Gynecology	101001	Vaginal CT/MR applicator		×		
Gynecology	110750	Vaginal CT/MR multi channel applicator		×		
Gynecology	189018	Vaginal mold applicator	x			
Gynecology	not applicable	Advanced Gynecological Applicator Venezia		×		
Gynecology	189569/699/792	Vienna ring CT/MR applicator		×		
Breast	110518	Breast CT/MR applicator	Depending on (	use of OncoSmar	t or type of needle	s
Breast	189006	Kuske breast applicator				
Breast	various	OncoSmart catheter				
Prostate, rectum and bladder	110564/565/566/567	Luneray applicator				
Prostate, rectum and bladder	189011	Intracavitary mold applicator				
Prostate, rectum and bladder	083570/571, 089055/056	MUPIT applicator				
Prostate, rectum and bladder	137280	Martinez prostate template				
Prostate, rectum and bladder	189069	Prostate stepper template 5F	Depending on (	use of type of nee	edles	
Prostate, rectum and bladder	189070	Prostate stepper template 6F	_			
Skin	089095	Freiburg Flap applicator				
Skin	085040	Leipzig applicator	x			
Skin	189701	Valencia skin applicator	x			
Head and Neck	045410	Pipard tongue template	Depending on (	use of flexible imp	plants	
Head and Neck	089068	Rotterdam nasopharyngeal Mold				
Needles	various	Stainless steel needles (Interstitial/Trocar point/Bevel point)				
Needles	various	ProGuide needles 5F				
Needles	various	ProGuide needles, 6F				
Flexible implant tubes	various	Flexible implant tubes, 5F				
Flexible implant tubes	various	Flexible implant tube, 6F				+
					1	

Note: bronchus and esophagus applicator sets include adapters to insert the applicator directly in the indexer

Transfer tubes for microSelectron

insfer be set <sup>r</sup> skin	Transfer tub	be set for need	dles	Transfer tul	be set 4F		Transfer tul	be set 5F		Transfer tul	Transfer tube set 6F		
3	1-9	10-18	19-30	1-9	10-18	19-30	1-9	10-18	19-30	1-9	10-18	19-30	
.11004	111011	111021	111140	111071	111081	111600	111051	111061	111614	111031	111041	111628	
										x			
										x	x		
										×	×		
										×	x		
										x	×		
	x	X											
										x	×	x	
				x	×	x							
										x	×	×	
	x	×								X	x		
	^	^											
Y										×	×	×	
x x													
										x			
	×	×	×										
							×	x	×	~			
							x	x	x	x	x	x	
										x	x	x	

For almost five decades, Elekta has been a leader in precision radiation medicine.

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