

# B. Braun Regional Anesthesia: Customers' First Choice for Safe Pain Therapy

Catalogue



New Products  
inside

**B | BRAUN**  
SHARING EXPERTISE

# B. Braun Regional Anesthesia

## Customers' First Choice for Safe Pain Therapy

### Patient outcome at the best

During the recent years it became evident that the use of Regional Anesthesia techniques considerably improves patient outcome. Therefore it is our goal to foster the spread of Regional Anesthesia usage and eventually make it the first choice.

Beyond providing excellent products it is our commitment to support you with outstanding services:

- In cooperation with our customers we develop innovative products, perfectly adapted to your daily clinical personal needs.
- You will find valuable and up-to-date information material on Regional Anesthesia techniques as well as on our products and their proper application.
- We want you to benefit from our unique offer to share the practical knowledge and experience with your colleagues during educational workshops, lectures and symposia.
- We offer you a well balanced portfolio of innovative and high quality products which are designed to meet your clinical needs.

### B. Braun Regional Anesthesia:

### Customers' First Choice for Safe Pain Therapy



**Service and Education**



**Spinal Anesthesia**



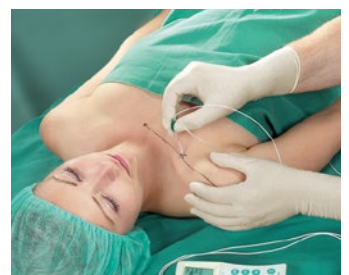
**Epidural Anesthesia**



**Combined Spinal & Epidural Anesthesia**



**Peripheral Nerve Blocks**



**Continuous Wound Infusion**



# B. Braun Regional Anesthesia

## Sharing Expertise – Our Commitment to Make Clinical Processes Safer, Faster & Easier

### Networking the knowledge

Professional performance of Regional Anesthesia does not only require excellent devices but also profound knowledge and skills, i.e. education and training on anatomy, techniques and product application.

All over the world B. Braun runs and supports professional training classes in Regional Anesthesia under the umbrella of Aesculap Academy as well as locally organized lectures, workshops and symposia.

Furthermore, we offer to mediate direct contacts to experts covering all aspects of Regional Anesthesia from simple questions up to individual hands-on training in clinical settings.

Join the various events and learn from international experts and use our MediaService to teach your young care givers.

Participate in our dialogue on knowledge and its value for superior Regional Anesthesia.

### The power of knowledge

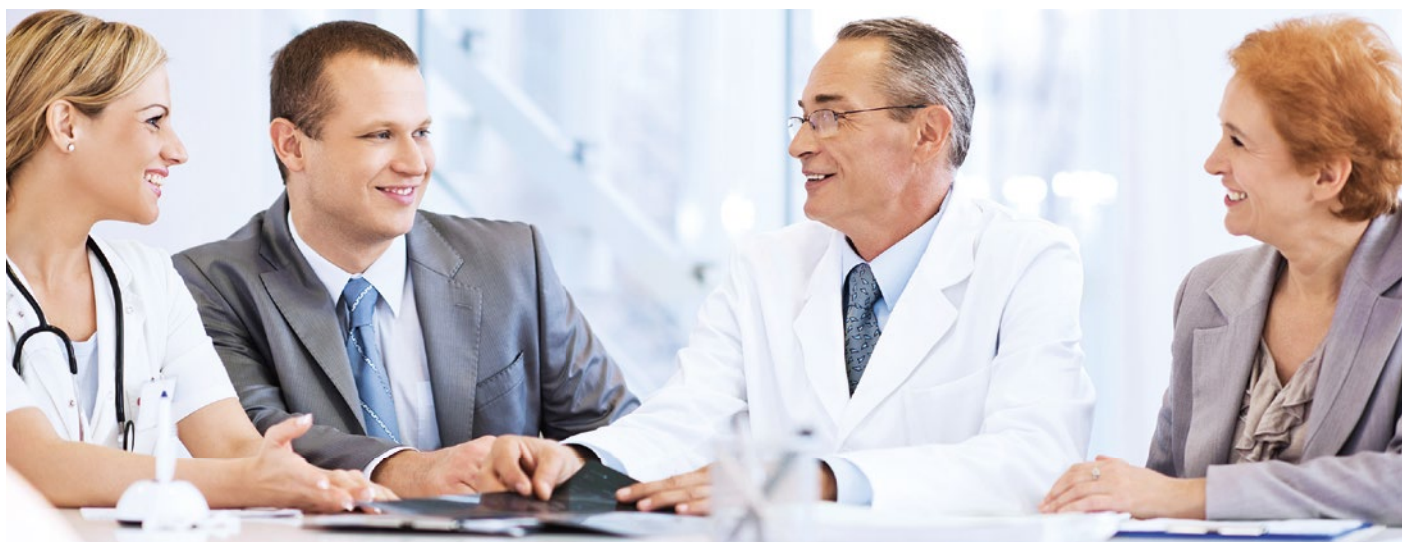
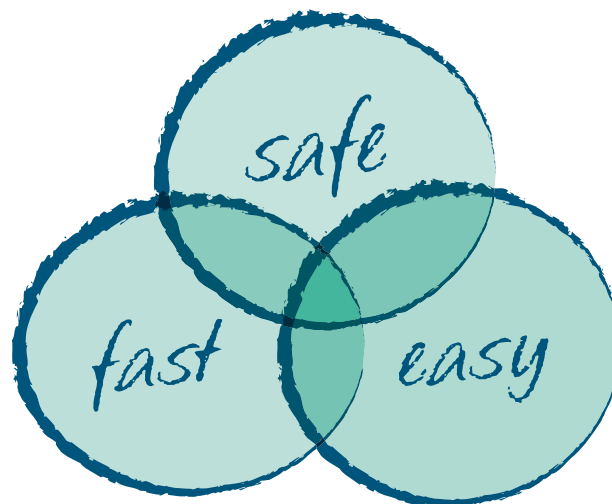
Outstanding products and superior solutions for Regional Anesthesia are the essential benefits you can expect from B. Braun. We offer a source of knowledge from the world of practice to the world of practice.

Providing students, physicians and nursing staff with such information B. Braun significantly contributes to a higher level of quality in medical care.

### B. Braun Regional Anesthesia: Customers' First Choice for Safe Pain Therapy

#### Be part of the network

- Profit from education and training tailored to your needs
- Obtain CME credits
- Customized workshops perfectly adapted to your individual needs
- Professional and constantly updated MediaService to improve your internal education







### App RKU Tutorial

Peripheral Regional Anesthesia, tutorial in the Ulm Rehabilitation Hospital (RKU)  
<http://itunes.apple.com>



### PNB NYSORA POSTER

- Upper extremity:  
Humeral canal approach
- Lower extremity:  
Sciatic nerve block

Product	Code No. (REF)
Upper Extremity	606 1202
Lower Extremity	606 1201



### RKU Tutorial DVD

Peripheral Regional Anesthesia, tutorial in the Ulm Rehabilitation Hospital (RKU), 4th expanded edition



### Espocan® DVD

CSE – The Clinical Practice of Combined Spinal and Epidural Anesthesia  
 DVD, duration 41 min.

Product	Code No. (REF)
RKU Tutorial DVD	606 6667

Product	Code No. (REF)
Espocan® DVD	604 3102



### RKU Compact

Peripheral Regional Anesthesia, tutorial in the Ulm Rehabilitation Hospital (RKU), 4th



### ON-Q® Tunneling & Catheter Placement Techniques (Ver. 2)

- ON-Q® Tunneling Videos
- ON-Q® Catheter Placement Videos

Product	Code No. (REF)
RKU Compact	606 4605 B

Product	Code No. (REF)
ON-Q® DVD	606 7006



### Dual Guidance Brochure

Product	Code No. (REF)
Dual Guidance Brochure	606 8070

... for further information visit [www.bbraun.com](http://www.bbraun.com) and [www.nerveblocks.net](http://www.nerveblocks.net).  
 Please get in contact with your B. Braun office.

# B. Braun Spinal Anesthesia

## Design Follows Function – Without Compromise!

Spinal Anesthesia is undoubtedly a standard technique in Regional Anesthesia. However, innovation focused on other Regional Anesthesia disciplines so far and as such, Spinal needles remained relatively unchanged.

In order to improve our well known Spinocan® and Pencan® needles we made sure to listen to the market – to you.

With input from our customers around the globe, we defined the key features that are most important for the spinal procedure:

- Quick and easy visible CSF flashback
- Superior tactile feedback for easy identification of tissue structures
- Consistent feel

Your expert feedback resulted in the design of a unique new product... one that will lead the way into the precision in Spinal Anesthesia.

### User benefits for safe application

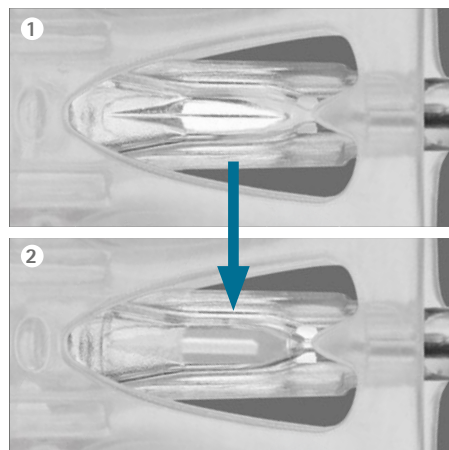
- Ergonomic hub designed for:
  - enhanced needle control
  - improved grip and tactile feedback
- Crystal prism for fast and easy identification of CSF flashback in the needle hub:
  - "Total reflection" – Prism shines silver before CSF enters the hub (1)
  - Transparency – Prism turns transparent when CSF enters the hub (2)
- Introducer design providing 10mm more usable Spinal needle length



Ergonomic hub



Crystal prism



New introducer





Scale 20:1

... needles unchanged,  
proven quality!



Scale 20:1



Scale 20:1

#### **Pencan® with Pencil Point bevel**

- Safe handling through easy identification of tissue structures, excellent tactile feedback
- Protection against PDPH, paresthesias, vascular puncture and nerve damage thanks to the atraumatic tip design
- Sturdy design, no tip deformation even after bone contact
- Minimal intrathecal penetration depth, avoiding incomplete blocks due to needle-tip design

#### **Spinocan® with Quincke bevel**

- Sharp bevel for low puncture force
- Safe control due to reliable sensation of the tactile dura click
- Low rate of PDPH thanks to fine gauge needle design
- Perfect stylet fit, i.e. no tissue coring (risk of epidural tumor formation)

#### **Atraucan® with Two-Zone bevel**

- Low puncture force
- Minimal puncture trauma
- Greatly reduced risk of PDPH

Atraucan® features a particularly subtle, sensitive bevel geometry allowing atraumatic puncture. First, a small, accurate incision is made with the first sharp zone bevel. Then, the dura mater is dilated by the second non-cutting zone bevel with no further trauma, minimizing the risk of postdural puncture headache (PDPH).

# B. Braun Continuous Spinal Anesthesia

## Advanced Accurate Technique – Spinocath

### Continuous Spinal Anesthesia – A safe method

Which anesthetic technique is most suitable for the specific procedure and patient is one of the central questions confronting anesthesiologists every day. Continuous Spinal Anesthesia (CSA) offers many advantages for both physician and patient.

Compared to Epidural Anesthesia, CSA provides safer preoperative confirmation of catheter position, faster onset of action and more reliable blockade. Moreover, only 1/10 to 1/5 of anesthetic is required, resulting in a much lower risk of systemic toxic reactions.

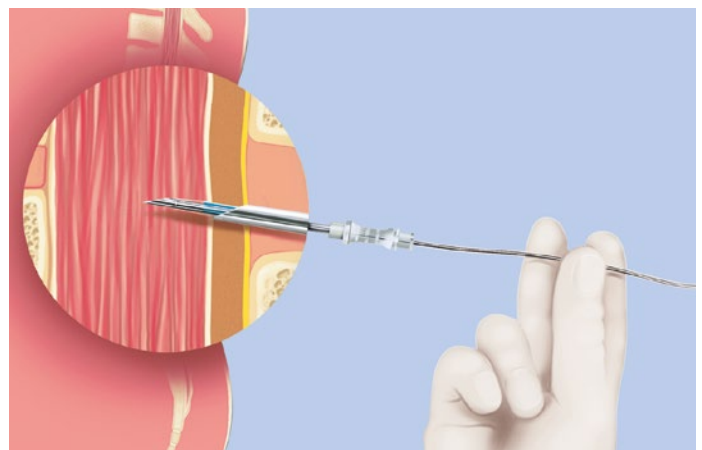
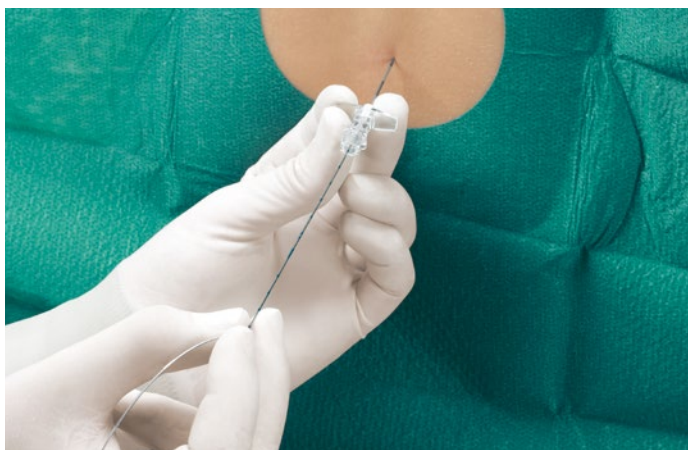
In contrast to single-dose Spinal Anesthesia, with CSA the anesthetic can be administered during the operation. Repeat dosing to prolong and control the duration and level of blockade is possible at any time, thereby improving overall anesthesia control. The block also subsides more rapidly. The risk of cardiovascular side effects and respiratory compromise is significantly reduced.

#### User benefits

- Intelligent over-the-needle design: No CSF leakage, therefore minimized risk of PDPH
- Quick positive feedback on catheter position
- Less medication required, i.e. minimal risk of toxic reactions and cardiovascular side effects
- Postoperative pain management
- Short recovery periods



The typical Spinocath grip for safe catheter/needle insertion





**Spinocath® – intelligent design**

Spinocath® features a unique catheter-over-needle design, the catheter is positioned over the spinal needle. After puncturing the dura mater the needle is withdrawn from the catheter, which simultaneously seals the hole in the dura. In this way, CSF leakage is prevented right at the start of the procedure, reducing the risk of postdural puncture headache (PDPH) to a minimum.

**Control through feedback****Conventional products:****CSF leakage – high risk of PDPH**

Catheter is smaller than dural opening, considerable CSF leakage after removal of the puncture needle is to be expected



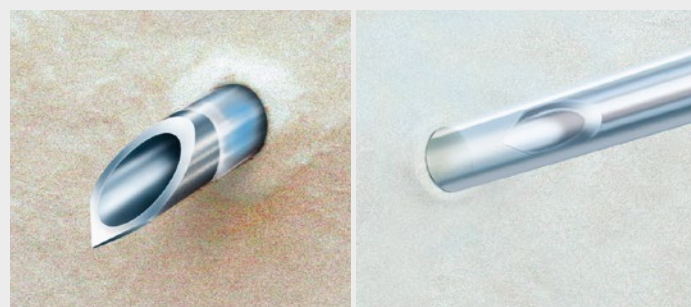
1. Situation upon dural puncture within the intrathecal space

2. Outside the intrathecal space after removal of needle

Spinocath® provides the anesthesiologist with accurate feedback. The pronounced dura click, and the visual check of CSF flashback in a second, confirming the intrathecal catheter position.

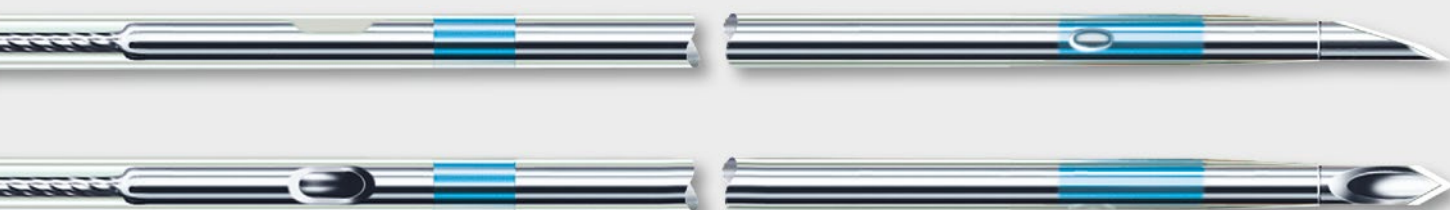
**Spinocath®:****No CSF leakage – minimal risk of PDPH**

Catheter is larger than spinal needle thus dilates and seals the dural opening




1. Situation upon dural puncture within the intrathecal space

2. Outside the intrathecal space after removal of needle











# B. Braun Spinal Anesthesia

## Product Specifications



Spinocan®	Size	Length ø (mm)	Needle ø (mm)	Length (inch)	Sales unit/Pcs.	Code No. (REF)
	Quincke needles for Spinal Anesthesia					
	 29 G	88 *	0.33	3 1/2"	25	4501900-13
	 27 G	88	0.4	3 1/2"	25	4503902-01
	 26 G	88	0.45	3 1/2"	25	4502906-01
	 25 G	75	0.5	3"	25	4505751-01
	 25 G	88	0.5	3 1/2"	25	4505905-01
	 22 G	40	0.7	1 1/2"	25	4507401-13
	 22 G	75	0.7	3"	25	4507754-13
	 22 G	88	0.7	3 1/2"	25	4507908-01
	 20 G	75	0.9	3"	25	4509757-13
	 20 G	88	0.9	3 1/2"	25	4509900-01
	 19 G	40	1.1	1 1/2"	25	4501144-13
	 19 G	88	1.1	3 1/2"	25	4501195-13
	 18 G	75	1.3	3"	25	4501373-13
	 18 G	88	1.3	3 1/2"	25	4501390-01
	Quincke needles long length					
	 29G	120	0.33	4 3/4"	25	4501918-13
	 27G	120	0.4	4 3/4"	25	4502140-13
	 26G	120	0.45	4 3/4"	25	4504917-13
	 25G	120	0.5	4 3/4"	25	4505913-13
	 22G	120	0.7	4 3/4"	25	4506090-13

\*with guide needle

Pencan®	Size	Length ø (mm)	Needle ø (mm)	Length (inch)	Sales unit/Pcs.	Code No. (REF)
	Pencil-point needles for Spinal Anesthesia					
	27 G	88	0.4	3 1/2"	25	4502027-01
	27 G	88*	0.4	3 1/2"	25	4502051-13
	27 G	103*	0.4	4"	25	4502124-13
	27 G	120	0.4	4 3/4"	25	4502132-13
	25 G	88	0.5	3 1/2"	25	4502019-01
	25 G	88*	0.5	3 1/2"	25	4502043-13
	25 G	103*	0.5	4"	25	4502116-13
	25 G	120	0.5	4 3/4"	25	4502120-13
	25 G	156	0.5	6"	25	333877-05
	22 G	88	0.7	3 1/2"	25	4502035-13
	Pencil point needles long length					
	27 G	120	0.4	4 3/4"	25	4502132-13
	25 G	120	0.5	4 3/4"	25	4502120-13
	25 G	156	0.5	6"	25	333877-05
	For Pediatric Anesthesia					
	27 G	50	0.4	2"	25	4502175-13
	25 G	25	0.5	1"	25	4502167-13
	25 G	50	0.5	2"	25	4502159-13
*with spinal introducer needle						
Spinal Introducer Needles (Round Hub)	Size	Length ø (mm)	Needle ø (mm)	Length (inch)	Sales unit/Pcs.	Code No. (REF)
for Spinocan® and Pencan®: 10mm additional usable needle length 	for spinal needles  29 G and  27 G					
	 22 G	35	0.7	1 3/8"	25	4500059-13
	for spinal needles  26 G and  25 G					
	 20 G	35	0.9	1 3/8"	25	4505000-13


# B. Braun Spinal Anesthesia






## Product Specifications


Spinocan®	Size	Length ø (mm)	Needle ø (mm)	Length (inch)	Sales unit/Pcs.	Code No. (REF)
	Quincke needles for Spinal Anesthesia					
	29 G	88 *	0.33	3 1/2"	25	4501900
	27 G	88	0.4	3 1/2"	25	4503902
	26 G	88	0.45	3 1/2"	25	4502906
	25 G	75	0.5	3"	25	4505751
	25 G	88	0.5	3 1/2"	25	4505905
	22 G	40	0.7	1 1/2"	25	4507401
	22 G	75	0.7	3"	25	4507754
	22 G	88	0.7	3 1/2"	25	4507908
	20 G	75	0.9	3"	25	4509757
	20 G	88	0.9	3 1/2"	25	4509900
	19 G	40	1.1	1 1/2"	25	4501144
	19 G	88	1.1	3 1/2"	25	4501195
	18 G	75	1.3	3"	25	4501373
	18 G	88	1.3	3 1/2"	25	4501390
	Quincke needles long length					
	29 G	120	0.33	4 3/4"	25	4501918
	27 G	120	0.4	4 3/4"	25	4502140
	26 G	120	0.45	4 3/4"	25	4504917
	25 G	120	0.5	4 3/4"	25	4505913
	22 G	120	0.7	4 3/4"	25	4506090
	Special atraumatic needles for Spinal Anesthesia, with Atraucan® guide needle					
	26 G	88	0.45	3 1/2"	25	4504739
	Special atraumatic needles for Pediatric Anesthesia: Atraucan® Paed					
	26 G	25	0.45	1"	25	4504771
	26 G	50	0.45	2"	25	4504763

Gauge sizes and needle dimensions according to EN ISO 9626



Pencan®	Size	Length ø (mm)	Needle ø (mm)	Length (inch)	Sales unit/Pcs.	Code No. (REF)
 <p>*with guide needle</p>	Pencil-point needles for Spinal Anesthesia					
	27 G	88	0.4	3 1/2"	25	4502027
	27 G	88*	0.4	3 1/2"	25	4502051
	27 G	103*	0.4	4"	25	4502124
	25 G	88	0.5	3 1/2"	25	4502019
	25 G	88*	0.5	3 1/2"	25	4502043
	25 G	103*	0.5	4"	25	4502116
	22 G	88	0.7	3 1/2"	25	4502035
	Pencil point needles long length					
	27 G	120	0.4	4 3/4"	25	4502132
	25 G	156	0.5	6"	25	333877
	For Pediatric Anesthesia					
	27 G	50	0.4	2"	25	4502175
	25 G	25	0.5	1"	25	4502167
	25 G	50	0.5	2"	25	4502159

Spinal Introducer Needles (Square Hub)	Size	Length ø (mm)	Needle ø (mm)	Length (inch)	Sales unit/Pcs.	Code No. (REF)
 <p>for Spinocan® and Pencan®</p>	for spinal needles  29 G and  27 G					
	22 G	35	0.7	1 3/8"	25	4500059
	for spinal needles  26 G and  25 G					
	20 G	35	0.9	1 3/8"	25	4505000

Spinocath®	Needle outer ø (mm)	G	Catheter outer/ inner ø (mm)	Catheter length (mm/inch)	G	Sales unit/ Pcs.	Code No. (REF)
	Catheter set 24 G, with needle, Perifix® LOR syringe, Perifix® catheter connector						
	0.33	29	0.71/0.41	720/28"	24	5	4517717
	Catheter set 22 G, with needle, Perifix® LOR syringe, Perifix® catheter connector						
	0.4	27	0.85/0.45	720/28"	22	5	4517725

Updated packaging!

Updated packaging!

# B. Braun Epidural Anesthesia

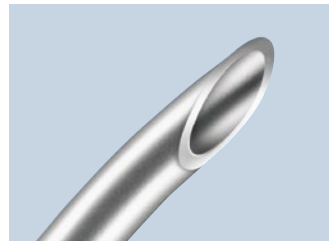
## Uncompromising Quality in Your Experienced Hands

### B. Braun epidural needles

Each patient presents a unique anatomical challenge, therefore precision and versatility are equally important in epidural procedures. With B. Braun epidural needles you are ensured accurate construction and reliability.

#### Tuohy-type needles

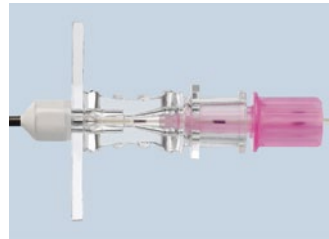
- The unique Tuohy curve and bevel design:  
Excellent feel and differentiation of tissue layers
- Highest quality of bevel grinding:  
Consistent tactile feedback in each procedure
- Polished inner bevel edge:  
Minimizes the risk of catheter shearing



Polished inner bevel edge minimizes the risk of catheter shearing

#### User benefits for safe application

- Unique high precision Tuohy curve and bevel design for excellent tactile feedback and differentiation of tissue layers
- Superior bending stiffness – perfect control of needle advancement
- Full range of adult and pediatric sizes for all procedures



Threading assist guide fits securely into needle hub and assists easy advancement of the catheter



Safe catheter insertion using the threading assist guide



### Perifix® catheters are highly appreciated – worldwide

An increasing use of epidural catheters for various applications in anesthesia, analgesia and pain therapy requires specific catheter features and a diversity of performance criteria.

Perifix® epidural catheters are made from a unique plasticizer-free and latex-free formulation of polyamide with superior bio-compatibility.

#### User benefits for safe application

- Perifix® Standard and Soft Tip catheters
  - Excellent shaft stability and kink resistance while still flexible for easy placement and removal
  - Crystal clear for easy visualization of fluids
- Perifix® Soft Tip catheter
  - Additional features to the above:
    - Flexible and atraumatic soft tip design
    - Reduced risk of complications
- Perifix® ONE
  - High success rates and fewer complications, easy and safe to place
  - Complete blocks through perfect spread
  - Increased safety, no confusion with other infusion lines

### Perifix® – The most comprehensive range of epidural catheters

Easy catheter insertion requires a relatively stiff catheter shaft to provide adequate thrust: Perifix® Standard.

However, a soft catheter is more difficult to thread and remove. The ideal epidural catheter is the combination of a stiff but flexible catheter shaft combined with a very soft atraumatic tip: Perifix® Soft Tip.

Now ideal stiffness for catheter insertion, desired softness for placement inside the body are combined with a novel tip configuration, and 3 pairs of laser drilled micro-holes in ONE yellow catheter: Perifix® ONE.

Highly flexible and kink-resistant polyamide catheter reduces the risk of catheter occlusion



Perifix® ONE Paed and Perifix® ONE (1),  
Perifix® Standard with closed tip and  
3 lateral eyes (2), Highly flexible tip and  
standard shaft with 3 lateral openings:  
Perifix® Soft Tip (3)

Scale 20:1

# B. Braun Epidural Anesthesia

## The Innovation Line – Perifix®

### Loss-of-Resistance (LOR) syringe

Clear identification of the epidural space does not only require skill and experience on the part of the anesthesiologists, but also a high precision low-friction Loss-of-Resistance device. The Perifix® LOR syringe is suitable for both, air and saline technique and all Perifix® LOR syringes are latex-free. The performance of the Loss-of-Resistance technique requires a good match between the Tuohy epidural needle and the LOR syringe.

### Perifix® filter with PinPad

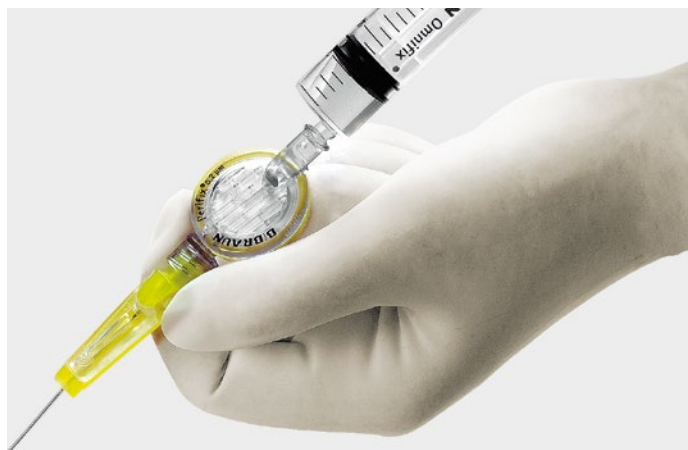
In epidural anesthesia, filters provide an additional degree of safety and control to prevent bacterial infections. Minimal dead space enables accurate dosing. A high pressure resistance up to 7 bar enhances safety during manual injection. Together with our ideal fixation aid – the Perifix® PinPad – substantial time savings are possible. The self-adhesive, latex-free and hypoallergenic foam pad can be attached quickly to the skin and makes patient hygiene easy and more comfortable.

#### User benefits

- Easy-glide plunger with excellent glide characteristics
- Parabolic graduation markings prevent confusion with conventional syringes
- Latex-free

#### User benefits

- Perifix® filter with PinPad
  - Improved patient comfort and hygiene
  - Flexible fixation – no time wasted
- Perifix® connector
  - Safe catheter fixation
  - Easy to use ergonomic design
  - Clear feedback of action "click and ready"





### Perifix® Catheter Fixation

The Perifix® Catheter Fixation combines easy handling with enhanced catheter safety. Secondary catheter migration can be easily avoided. The examination of the puncture site is possible without the risk of re-positioning the catheter during the indwelling time. The flat design ensures high patient comfort.

#### User benefits

- Fixation ring:
  - offers a secure and easy fixation to prevent catheter migration
- Cover foil with non-adhesive center:
  - provides comfortable protection of puncture site
  - can easily be exchanged without risk of catheter displacement

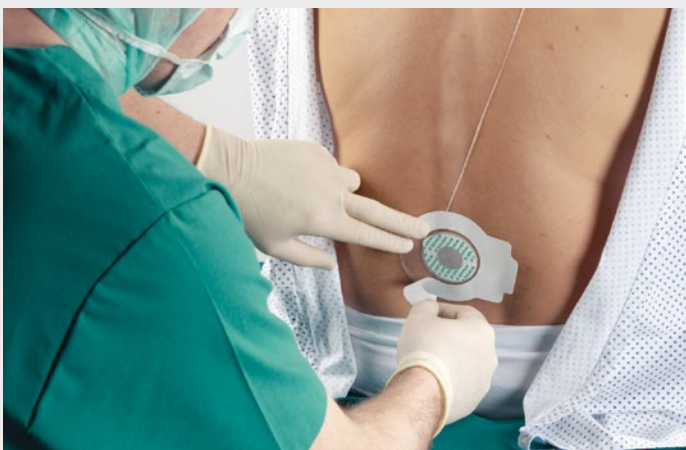


Fixation ring



Cover foil with non-adhesive center

Easy examination of the puncture site due to the features of the cover foil



Flat design ensures high patient comfort



# B. Braun Epidural Anesthesia

## Advanced Equipment for Your Little Patients

### The most delicate procedures require the most advanced equipment

Regional Anesthesia in children has received worldwide acceptance in the past decade and now plays a major role in stress- and pain control.

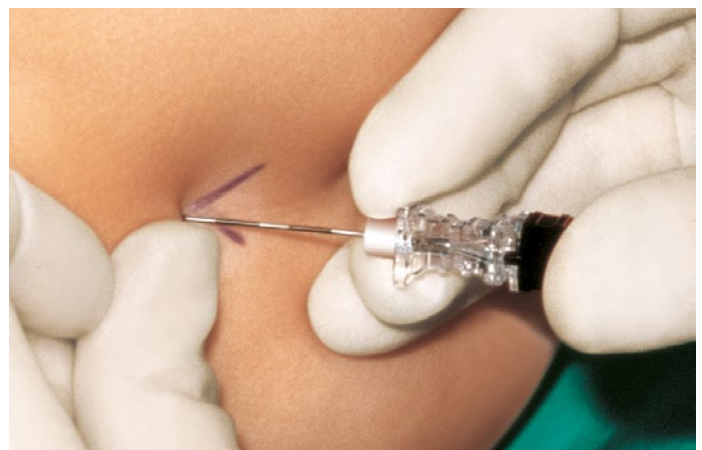
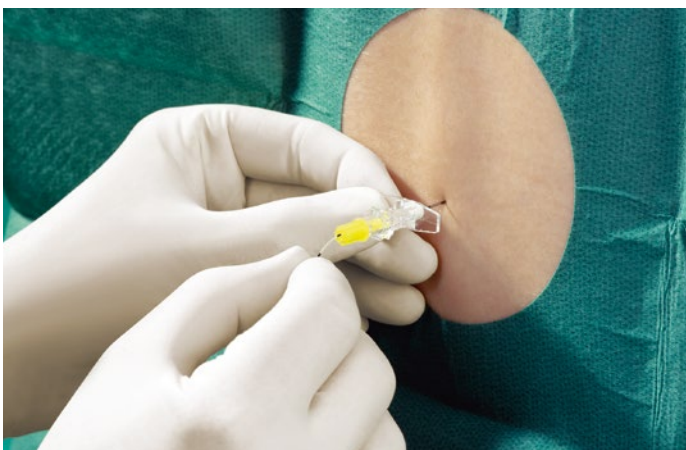
In children regional techniques are usually combined with light general anesthesia.

Regional blocks provide excellent peri- and postoperative pain relief which is an advantage for all children undergoing surgery. Regional anesthetic techniques can be used successfully and applied widely in pediatrics; however, specially designed and safe equipment is mandatory where children are concerned.

In close co-operation with renowned experts in pediatric Regional Anesthesia, B. Braun has developed a comprehensive practice-related product range which meets the up-to-date requirements in the field of epidural, caudal as well as plexus and Spinal Anesthesia ranging from single shot needles to sets for continuous catheterization.

#### User benefits

- Complete product range – suitable for each indication
- Suitable sizes for newborns, infants and schoolchildren
- Perfect stylet fit avoids coring effects



**Perican® Paed – Tuohy pediatric epidural needles**

Three different needle sizes

(1.3mm/18 G, 0.9mm/20 G, 0.7mm/22G)

- For continuous catheter placement and single shot technique
- Special length of 50 mm with 5 mm depth markings:  
Safe and accurate epidural puncture
- Precisely fitting stylets:  
Reduces the risk of tissue coring and potential epidermoid tumor development

**Epican® Paed – Caudal pediatric needles**

Three different needle sizes

(0.9mm/20 G, 0.7mm/22 G, 0.5mm/25 G)

- Special lengths of 50 mm, 35 mm, and 30 mm with 5 mm depth markings: Safe and accurate caudal puncture
- Precisely fitting stylets:  
Reduces the risk of tissue coring and potential epidermoid tumor development

**Perifix® ONE Paed – Epidural sets**

Perifix® ONE Paed epidural sets in 20/24 G for newborns and infants, and 18/20 G for older children:

- Catheters with practice-related distance markings for pediatric use
- For safe catheter insertion and position control



# B. Braun Epidural Anesthesia

## The ProSet Principle

### ProSet – the intelligent concept for optimizing your processes

Safety only exists when all components in a process chain are optimally aligned with one another. The intelligent ProSet solution combines clinical requirements with your needs.

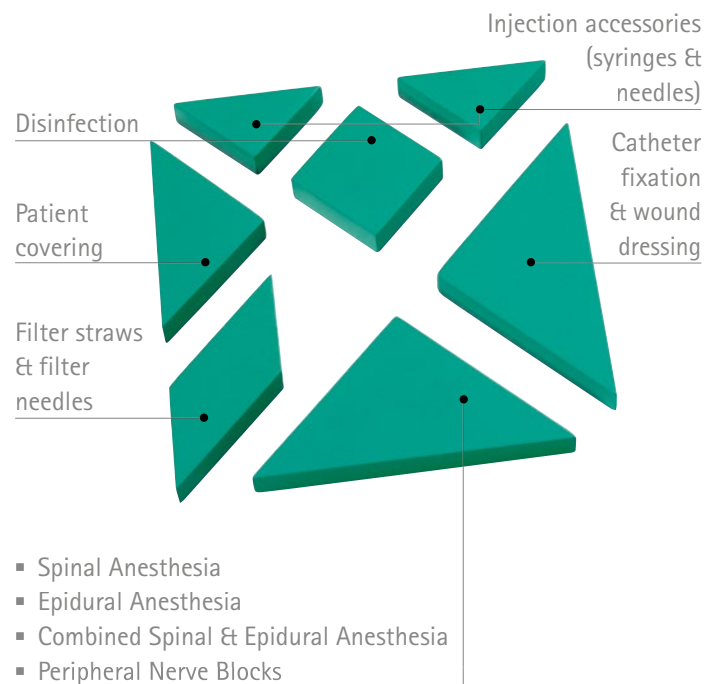
Tangram, the ancient Chinese puzzle consisting of seven pieces, is a synonym for the ProSet system solution. The individual alignment of Tangram pieces allows for a variety of combination options to form different mosaics.

Similar to Tangram, we offer a range of selected components that can be used to fulfill your needs and medical requirements. ProSet's modular system helps to define standards and therefore increases the quality and safety of your work.

ProSet – a variety of options to optimize your processes.

#### User benefits

- Everything needed is assembled in one kit, no mix-ups and less contamination risk
  - Save time and efforts
  - Create your most effective and economic procedure kit



Your complete  
**ProSet**





### Excellent preconditions for treatment success

Choose the configuration that suits you from our successful Perifix® series and increase safety and reliability in your day-to-day work. To meet increasing requirements, there is an extensive range of application-specific sets – that match individual techniques and processes.

The epidural anesthesia module consists of the following components:

- Perican® Tuohy epidural needle
- Perifix® epidural catheter
- Perifix® catheter connector
- Perifix® EF epidural filter 0.2µ
- Perifix® PinPad
- Perifix® LOR syringe

The comprehensive range of epidural needles and catheters meets your individual requirements and has been optimized to suit the needs of clinical practice. The innovative and ergonomic design of the components in your ProSet offers improved hygiene and increased patient comfort.

### Our service for your perfect solution

Our ProSet team offers their services to consult and support you in composing the optimal procedure kit tailored to your specific clinical needs. You can choose from a variety of component assemblies which reflect the customers' needs and facilitate the selection of components required.

For further information please contact your local representative.





# B. Braun Epidural Anesthesia

## Product Specifications

Epidural Needles	Size	Length (mm)	Needle ø (mm)	Length (inch)	Sales unit/Pcs.	Code No. (REF)	
	Perican® with Tuohy bevel						
	 18 G	80	1.3	3 1/4"	25	4512383	
	 18 G	120	1.3	4 3/4"	25	4512453	
	 18 G	150	1.3	6"	25	4512200	
	 17 G	80	1.5	3 1/4"	25	4512588	
	 16 G	80	1.7	3 1/4"	25	4512782	
	Epican® with 45° Crawford bevel						
	 18 G	90	1.3	3 1/2"	25	4513908	
Pediatric Needles	Size	Length (mm)	Needle ø (mm)	Length (inch)	Wings	Sales unit/Pcs.	Code No. (REF)
	Perican® Paed with Tuohy bevel						
	 22 G	50	0.73	2"		25	4502078
	 20 G	50	0.9	2"		25	4502094
	 18 G	50	1.3	2"		25	4502302
	Epican® Paed for caudal anesthesia						
	 25 G	30	0.53	1 1/8"		25	4502400
	 22 G	35	0.73	1 9/8"		25	4502418
	 20 G	50	0.9	2"		25	4502426
Epidural Catheter with Catheter Connector	Catheter ø outer/inner/ Length (mm) (G)		Suitable for Perican®		Sales unit/Pcs.	Code No. (REF)	
	Catheter with 3 lateral eyes						
	0.85 / 0.45 / 1000 (20 G)		18 G 1.3 mm		25	4513150	
	1.05 / 0.60 / 1000 (19 G)		16 G 1.7 mm		25	4513258	
	Catheter with central opening						
	0.85 / 0.45 / 1000 (20 G)		18 G 1.3 mm		25	4513177	
	Catheter with 3 lateral eyes						
	0.85 / 0.45 / 1000 (20 G)		18 G 1.3 mm		25	4515048	
	Catheter with 6 lateral eyes						
	0.85 / 0.45 / 1000 (20 G)		18 G 1.3 mm		25	4513150C	
	1.05 / 0.60 / 1000 (19 G)		16 G 1.7 mm		25	4513258C	







Catheter gauge sizes according to EN ISO 9626

Perifix® Catheter Fixation	Description	Sales unit/Pcs.	Code No. (REF)
	Perifix® Catheter Fixation	25	4511200
	Perifix® Catheter Fixation Cover (only)	25	4511201

Perifix®	Description	Sales unit/Pcs.	Code No. (REF)
	Loss-of-Resistance (LOR) syringe, Luer-Slip	25	4637100
	Loss-of-Resistance (LOR) syringe, Luer-Lock	25	4638107
	<input type="checkbox"/> Perifix® catheter connector (19 G)	50	4513801
	<input checked="" type="checkbox"/> Perifix® catheter connector (20/24 G)	50	4513800
	Perifix® epidural flat filter 0.2 µm	25	4515501
	Perifix® PinPad filter fixation	25	4515510







# B. Braun Epidural Anesthesia

## Product Specifications

<p>Perican® Tuohy epidural needle</p> <p>■ 20 G ø 0.9 mm / Length 50 mm</p> <p>■ 18 G ø 1.3 mm / Length 80 mm</p> <p>■ 18 G ø 1.3 mm / Length 50 mm (Paed Set)</p> <p>□ 16 G ø 1.7 mm / Length 80 mm</p>										
	Perican® Tuohy epidural needle	50 / 80 mm    120 mm	Perifix® ONE epidural catheter, 6 lateral eyes	24 G    20 G    19 G	Perifix® epidural catheter, 3 lateral eyes	20 G    19 G	central opening	20 G	3 lateral eyes	Perifix® Loss-of-Resistance (LOR) syringe, Luer-Slip

Complete Sets	Typ	Perican®	Perifix® ONE			Perifix® Standard			Perifix® Soft Tip	Perifix® LOR
Perifix® Standard catheter	Perifix® 420	■				●				
	Perifix® 421	■				●				●
	Perifix® 430	□					●			
	Perifix® 431	□					●			●
	Perifix® 620	■						●		
Perifix® Soft Tip catheter	Perifix® 900	■							●	
	Perifix® 901	■							●	●
Perifix® ONE catheter	Perifix® ONE 420	■		●						
	Perifix® ONE 421	■		●						●
	Perifix® ONE 430	□			●					
	Perifix® ONE 431	□			●					●
Filter Sets	Typ	Perican®	Perifix® ONE			Perifix® Standard			Perifix® Soft Tip	Perifix® LOR
Perifix® Standard catheter	Perifix® 400	■				●				
	Perifix® 401	■				●				●
	Perifix® 402	□					●			●
	Perifix® 405	□					●			
	Perifix® 451	■				●				●
Perifix® Soft Tip catheter	Perifix® 700	■							●	
	Perifix® 701	■							●	●
	Perifix® 730	□							●	●
	Perifix® 750	■							●	●
Perifix® ONE catheter	Perifix® ONE 400	■		●						
	Perifix® ONE 401	■		●						●
	Perifix® ONE 402	□			●					●
	Perifix® ONE 405	□			●					
	Perifix® ONE 418		■	●						●
	Perifix® ONE 451	■		●						●
Pediatric Filter Sets	Typ	Perican®	Perifix® ONE			Perifix® Standard			Perifix® Soft Tip	Perifix® LOR
Perifix® ONE Paed	Perifix® ONE Paed 18	■		●						●
	Perifix® ONE Paed 20	■	●							●
Mini Sets	Typ	Perican®	Perifix® ONE			Perifix® Standard			Perifix® Soft Tip	Perifix® LOR
Perifix® Standard catheter	Perifix® 100	■						●		
	Perifix® 300	■				●				
	Perifix® 301	■				●				●
	Perifix® 302	□					●			●
	Perifix® 310	□					●			

Catheter gauge sizes according to EN ISO 9626

						* Sterican® needles 25G Length 16 mm, ø 0.5 mm 21G Length 40 mm, ø 0.8 mm 18G Length 40 mm, ø 1.2 mm
Omnifix® three part syringe, 3 ml, Luer-Lock	Omnifix® three part syringes, 3 ml, 20 ml, Luer-Lock, 3 hypodermic needles*	Omnifix® three part syringes, 3 ml, 10 ml, 20 ml, Luer-Lock, 3 hypodermic needles*	Perifix® epidural filter 0.2 µm pressure resistant up to 7 bar	Perifix® PinPad filter fixation	Perifix® catheter connector	

Omnifix®	Omnifix®/Sterican®	Omnifix®/Sterican®	Perifix® Filter	Perifix® Pin-Pad	Perifix® catheter connector	Sales unit/Pcs.	Code No. (REF)
						10	4514203
						10	4514211
						10	4514300
						10	4514319
						10	4516206
						10	4510291
						10	4510305
						10	4514203C
						10	4514211C
						10	4514300C
						10	4514319C
Omnifix®	Omnifix®/Sterican®	Omnifix®/Sterican®	Perifix® Filter	Perifix® Pin-Pad	Perifix® catheter connector	Sales unit/Pcs.	Code No. (REF)
						20	4514009
						20	4514017
						20	4514025
						20	4514050
						20	4514513
						20	4510216
						20	4510097
						20	4517309
						20	4517504
						20	4514009C
						20	4514017C
						20	4514025C
						20	4514050C
						10	4514183C
						20	4514513C
Omnifix®	Omnifix®/Sterican®	Omnifix®/Sterican®	Perifix® Filter	Perifix® Pin-Pad	Perifix® catheter connector	Sales unit/Pcs.	Code No. (REF)
						10	4512006C
						10	4512014C
Omnifix®	Omnifix®/Sterican®	Omnifix®/Sterican®	Perifix® Filter	Perifix® Pin-Pad	Perifix® catheter connector	Sales unit/Pcs.	Code No. (REF)
						20	4511000
						20	4513002
						20	4513010
						20	4513029
						20	4513100



# B. Braun Combined Spinal & Epidural Anesthesia

## The Perfect Team – Espocan®

### System for Combined Spinal–Epidural Anesthesia

Combined Spinal–Epidural Anesthesia (CSE) combines the advantages of Spinal and Epidural Anesthesia, the two major and well-established Regional Anesthesia techniques, which are used extensively in surgery and pain relief.

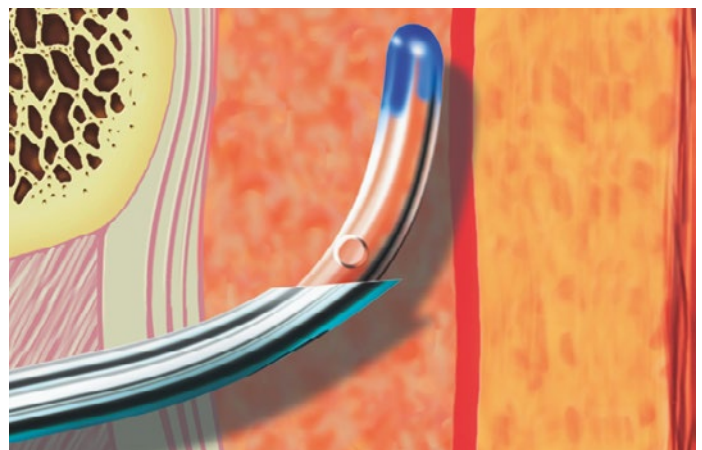
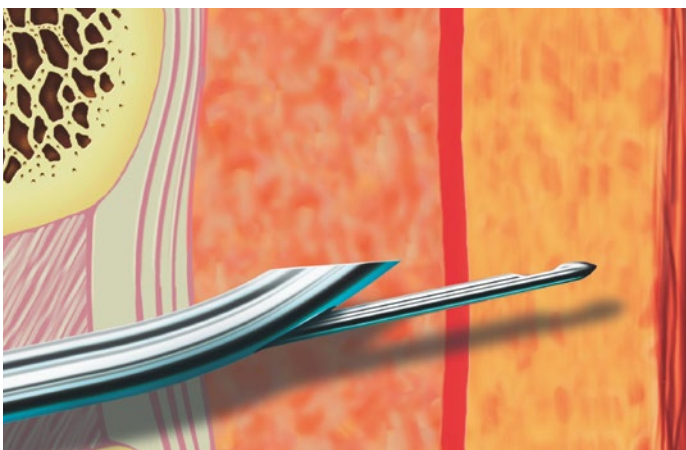
The conventional single interspace needle-through-needle approach was further improved by the development of a special Tuohy needle with an aperture (a back-eye) in the curved tip and a spinal needle with a plastic centering sleeve. This is the core of the perfect team of highest quality and well proven devices including Perifix® LOR syringe, epidural catheter, catheter connector as well as the Perifix® filter with PinPad.

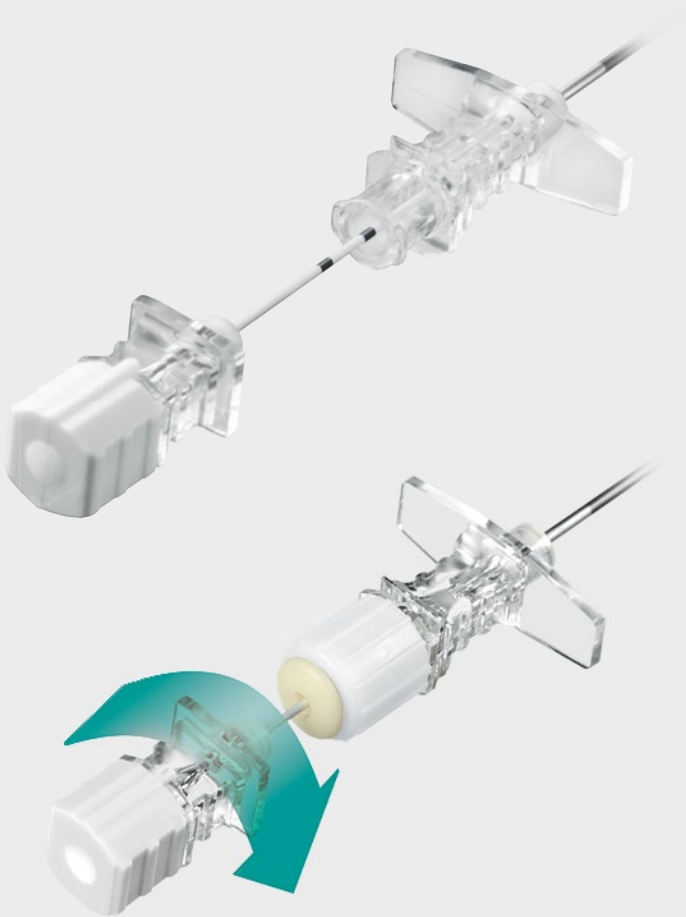
The perfect team you can always rely on.



### User benefits for safe application

- Perfectly matching components for a safe procedure
- Back-eye in Tuohy needle for safe insertion of spinal needle
- Docking system for safe fixation of spinal needle
- Sleeved spinal needle for smooth exit through the Tuohy needle back-eye and optimal tactile feedback



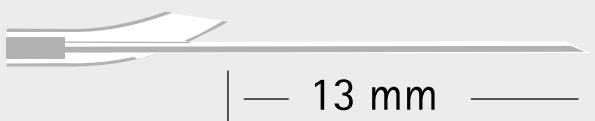
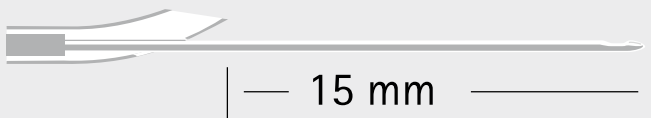


#### Markings on spinal needle for Espocan®

For more safety the spinal needles in each Espocan® set have special markings to indicate the moment when the spinal needle tip passes the back-eye. The markings refer to the use either with or without docking system.

#### The docking system

- Ensures safe and easy fixation of the spinal needle inside the Tuohy needle after successful dural puncture
- Allows rotation of the spinal needle even in the fixed position
- Avoids the difficult and uncomfortable finger grip to steady the spinal needle in position





The ideal protrusion of the spinal needle is:

- 15 mm for the Pencil Point needle to compensate for tenting effect
- 13 mm for the "Quincke" type needle

# B. Braun Combined Spinal & Epidural Anesthesia

## Product Specifications

Espocan® and Perifix® Standard	Size	Length (mm)	Needle ø (mm)	Length (inch)	Sales unit/Pcs.	Code No. (REF)
	With Quincke needle: Spinocan®					
	27G	125.5	0.42	5"	10	4556674
	With Pencil point needle: Pencan®					
	27G	127.5	0.42	5"	10	4556666
All sets including: <ul style="list-style-type: none"> <li>- Perifix® Standard catheter, 20 G, 3 lateral eyes</li> <li>- Perican® epidural needle ø 1.3 mm, 18 G x 3 1/2"</li> <li>- Perifix® Loss-of-Resistance (LOR) syringe, Luer-Slip</li> <li>- Perifix® epidural flat filter 0.2 µm</li> <li>- Perifix® PinPad</li> <li>- Perifix® catheter connector</li> </ul>						

Espocan® and Perifix® Soft Tip and Docking system	Size	Length (mm)	Needle ø (mm)	Length (inch)	Sales unit/Pcs.	Code No. (REF)
	With Quincke needle: Spinocan®					
	27G	136.5	0.42	5 3/8"	10	4556747
	With Pencil point needle: Pencan®					
	27G	138.5	0.42	5 3/8"	10	4556763
All sets including: <ul style="list-style-type: none"> <li>- Perifix® Soft Tip catheter, 20 G, 3 lateral eyes</li> <li>- Docking system</li> <li>- Perican® epidural needle ø 1.3 mm, 18 G x 3 1/2"</li> <li>- Perifix® Loss-of-Resistance (LOR) syringe, Luer-Slip</li> <li>- Perifix® epidural flat filter 0.2 µm</li> <li>- Perifix® PinPad</li> <li>- Perifix® catheter connector</li> </ul>						



# B. Braun Peripheral Nerve Blocks

## New Innovation for Best Patient Care

### New Ultrasound Product Platform

Ultrasound is revolutionizing the way peripheral Regional Anesthesia is being performed today. B. Braun's answer to the emerging customer needs with respect to ultrasound friendly Regional Anesthesia products is the Ultraline platform. The Ultraline initial package includes four products: two single shot cannulas and two continuous nerve block sets. The development of our echogenic portfolio concentrates on precision and patient safety. B. Braun has developed an unique precision laser technology, that allows us to optimize the ultrasound visibility of our needles, without compromising on the worldwide appreciated feel of our first class needles.

More information on [www.ultraline-bbraun.com](http://www.ultraline-bbraun.com).




### The Next Generation Catheter System

Contiplex® C stands for the second area of innovation for this dynamic medical discipline of peripheral Regional Anesthesia. The patented Multi-talent from B. Braun is the next generation of continuous peripheral nerve block system. Contiplex® C brings the best of both worlds together: single shot similar handling with the pain treatment abilities of a nerve block catheter.

Regardless of the technique and the approach you choose, B. Braun remain committed to offer you the right products and services to deliver the best patient care possible.

More information on [www.contiplexc-bbraun.com](http://www.contiplexc-bbraun.com)

## Whichever road you take ...

 <b>Nerve Stimulation</b>	 <b>Dual Guidance</b>	 <b>Ultrasound</b>
Single Shot Stimuplex® A Stimuplex® D	Stimuplex® Ultra Stimuplex® D Plus	Ultraplex®
Continuous Technique Contiplex® D Contiplex® S Contiplex® Tuohy	Contiplex® C Contiplex® S Ultra Contiplex® Tuohy Ultra	

... B. Braun has the right products to get you there.



### As easy as a single shot with the power of a catheter

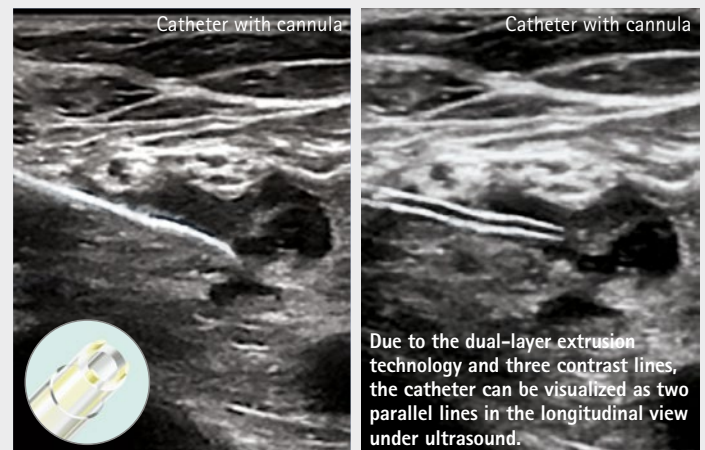
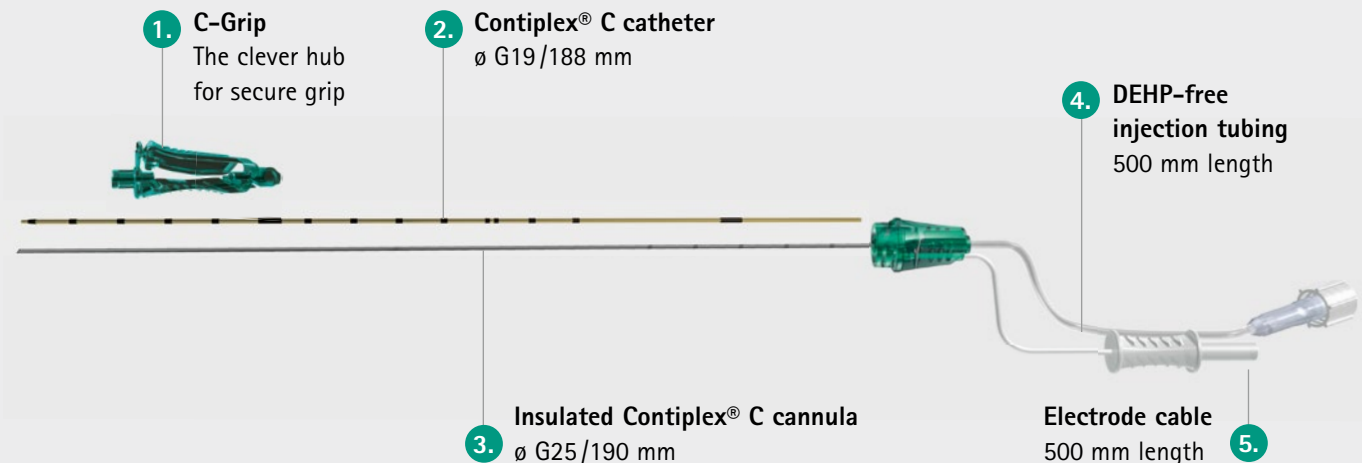
Contiplex® C is a novel and patented catheter placement system that makes continuous nerve blocks better, easier, and safer. The innovative catheter-over-the-needle design helps to overcome several of the limitations associated with peripheral catheters.

Further, the system provides optimized handling for ultrasound guided catheter placement.

#### User benefits

- Ideal for ultrasound: Highly echogenic catheter and ultrasound friendly handling that enables one handed catheter placement
- Less complexity: Fewer and more effective handling steps.
- Less leakage: More precise and reliable catheter placement.
- Less trauma<sup>1</sup>: More patient comfort with G25 puncture cannula.

<sup>1</sup>Steinfeldt T. Nerve injury by needle nerve perforation in regional anesthesia: does size matter? Br J Anaesth 2010. 104:245-53



Ultrasound pictures provided by Dr. S. Bloc, Claude Galien Private Hospital France

# B. Braun Peripheral Nerve Blocks

## Single-shot Technique

Single shot unipolar needles provide the basic anesthesia for short-term interventions or additional single nerve blocks in continuous techniques.

### Stimuplex® A

- With depth markings to identify puncture depth
- Crystal clear coating for excellent gliding through all tissue layers
- Well-proven puncture characteristics of 30° facet bevel

### Stimuplex® D

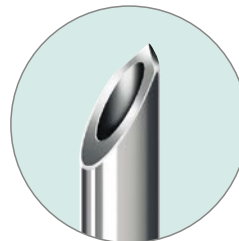
- Atraumatic fully coated stimulation needle
- Pin point electrode for precise nerve stimulation
- Available in 15° or 30° facet bevels according to personal gliding and puncture behavior preferences

### Stimuplex® D Plus

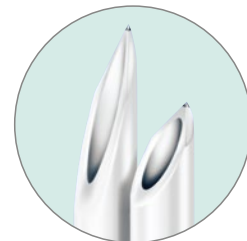
- Same features as Stimuplex® D
- Excellent ultrasound visibility through echogenic laser markings

#### User benefits

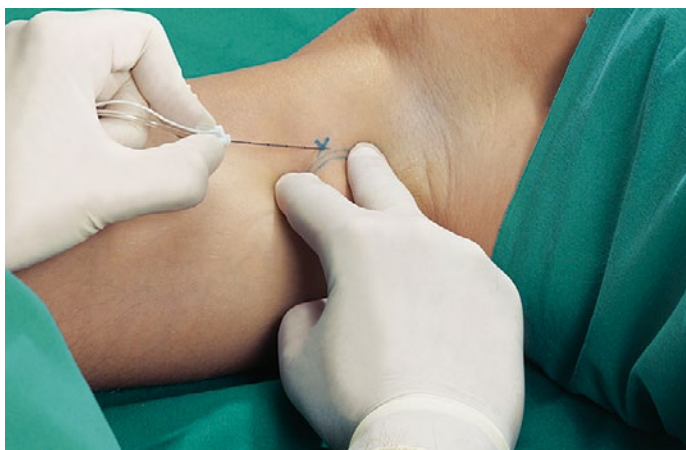
- Excellent puncture and gliding characteristics
- Comprehensive assortment of needle lengths from 35 to 150 mm and G25 to G20 sizes
- Ergonomic needle hub for enhanced tactile feedback



Stimuplex® A  
30° bevel



Stimuplex® D 15°  
or 30° bevel and  
Stimuplex® D Plus  
15° or 30° bevel



## Stimuplex® Ultra and Ultraplex®

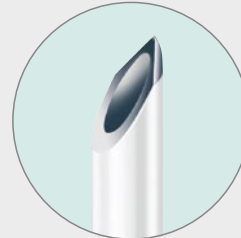
New

### Stimuplex® Ultra

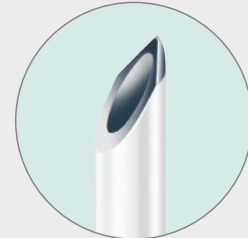
- For nerve stimulation and ultrasound
- Laser-crafted ultrasound reflectors with safety code pattern
- Well-approved 30° facet bevel with back cut
- High quality low friction coating
- 50 cm long DEHP-free injection tubing

### Ultraplex®

- A non-stimulating ultrasound only needle
- Laser-crafted ultrasound reflectors with safety code pattern
- Well-approved 30° facet bevel with back cut
- High quality low friction coating
- 50 cm long DEHP-free injection tubing



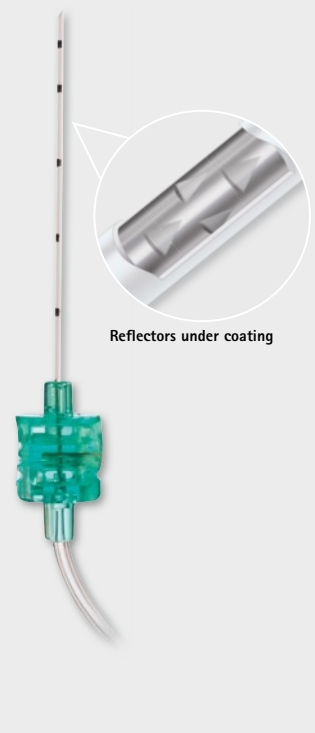
Stimuplex® Ultra  
30° bevel



Ultraplex®  
30° bevel



Reflectors under coating



Reflectors under coating

### User benefits

- Echogenic laser markings facilitate excellent needle visualization with minimal acoustic shadowing.<sup>1</sup>
- 50 cm long DEHP-free injection tubing. Same good puncture and gliding behavior of the cannulas.
- Ultrasound reflectors at multiple sites for easy needle detection.

<sup>1</sup> Reg Anesth Pain Med. 2010 Sep-Oct;35(5):E191.



# B. Braun Peripheral Nerve Blocks

## Continuous Technique

Continuous peripheral nerve block catheter sets allow pain relief during and after surgical procedures, providing the best possible patient recovery.

### Contiplex® D

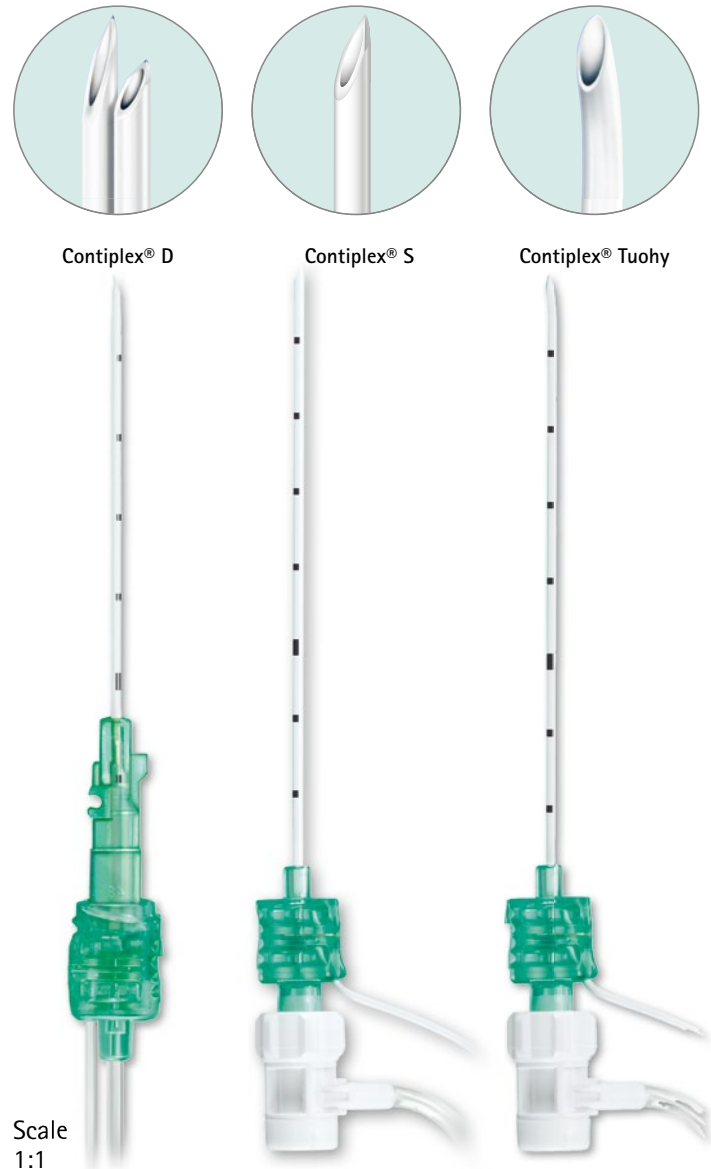
- 15° or 30° pin point facet tip
- Braunula catheter placement system

### Contiplex® S

- 20° facet bevel with pin point electrode
- Through-the-needle system

### Contiplex® Tuohy

- Fully coated Tuohy needle with pin point tip
- Through-the-needle system



### User benefits

- Wide range of catheter sets in cannula sizes G18 and G20 and lengths from 40-150 mm and catheters in 400, 500, and 1000 mm length
- Easy advancement and effective catheter placement with through-the-needle or Braunula Contiplex® system
- Improved ultrasound visibility of new Contiplex® catheter



### Contiplex® set components

- Insulated Contiplex® needle with integrated wire
- Catheter with threading assist guide
- Hemostasis Valve/Sideport (only for Contiplex® S/Contiplex® Tuohy)
- Perifix® catheter connector
- Perifix® filter
- Perifix® PinPad
- Omnifix® 5ml syringe
- Catheter label (Nerve blocks)



## Contiplex® S Ultra and Contiplex® Tuohy Ultra

New

### Contiplex® S Ultra

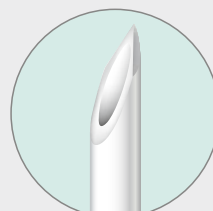
- For Nerve stimulation and ultrasound
- Fully coated 20° facet bevel with micro-dot electrode
- Catheter through-the-needle system
- With laser-crafted ultrasound reflectors for improved echogenicity

### Contiplex® Tuohy Ultra

- For Nerve stimulation and ultrasound
- Fully coated Tuohy bevel with micro-dot electrode
- Catheter through-the-needle system
- With laser-crafted ultrasound reflectors for improved echogenicity



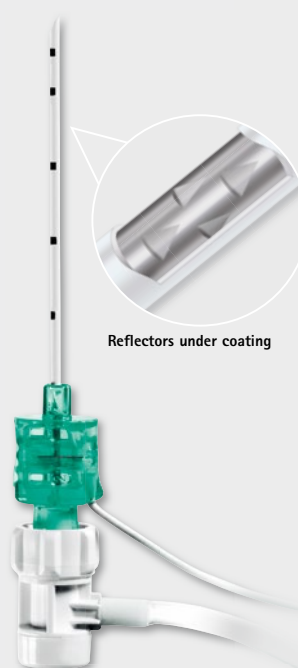
Contiplex®  
Sideport adapter



Contiplex® S Ultra  
20° bevel



Contiplex® Tuohy  
Ultra



Reflectors under coating



Reflectors under coating

Scale  
1:1

### User benefits

- Laser-reflector enhanced puncture needles for excellent echogenicity
- Improved ultrasound visibility of Contiplex® Ultra catheter
- Sideport adapter for simultaneous injection/aspiration and catheter threading

Contiplex® Ultra catheter with tapered tip and three pairs of lateral eyes

"Higher rigidity, better tip design and improved ultrasonic image facilitate perineural insertion of this catheter. Using long-axis (LAX) scans the nerve, the needle, the advancement and final positioning of the catheter as well as the spread of local anaesthetic, can all be imagined sequentially improving visual control."

Koscielniak-Nielsen ZJ, Rasmussen H, Hesselbjerg L.

Long-axis ultrasound imaging of the nerves and advancement of perineural catheters under direct vision: A preliminary report of four cases.

Reg Anesth Pain Med 2008 (in press)

CATHETER



Peripheral  
Nerve Blocks



# B. Braun Peripheral Nerve Blocks

## Stimuplex® HNS 12 with SENSE

The enlarged full graphic LC-display gives you all necessary information at a glance. High contrast and a wide viewing angle ensure excellent readability.

The following information is permanently displayed:

- Stimulus amplitude in mA (large digits)
- Stimulus duration in ms
- Stimulus frequency in Hz
- Load impedance in  $k\Omega$
- Charge delivered (in nC, if activated)

### User benefits

- Now with SENSE technology for safer, easier and more efficient nerve stimulation
- Advanced ergonomic shape and large display
- Digital ratchet dial for precise and tactile current adjustment
- Quick access buttons allow direct switching of key parameter values during procedure
- Alarm screens and acoustic signals inform the user of any relevant deviations



Transcutaneous nerve mapping with Stimuplex® Pen

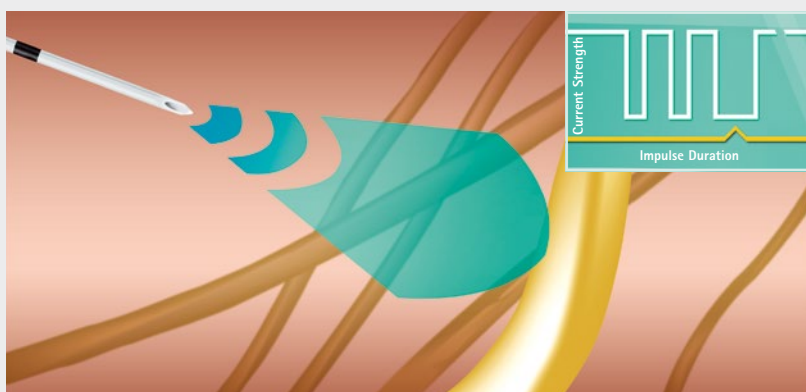


## What is SENSE?

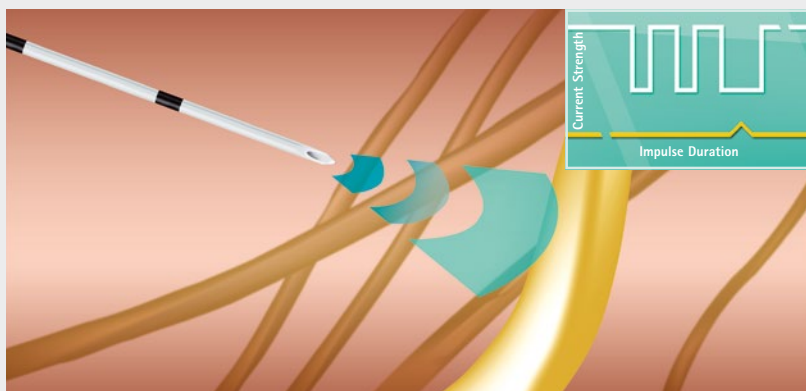
### Easier with SENSE

SENSe is a further development on the Stimuplex® HNS 12 offering more patient safety and improved clinical efficiency. In practice, marginal needle movements often lead to losing the muscle twitch. The SENSE technology (Sequential Electrical Nerve Stimulation) is a sequence of two fixed impulse durations

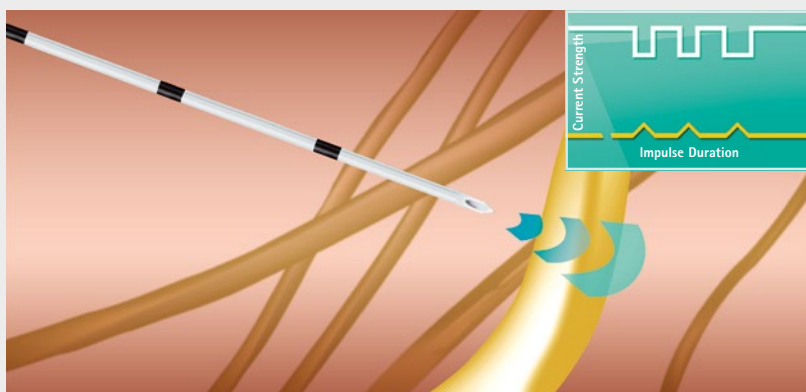
of 0.1 ms along with a third longer impulse duration. This results in getting the first muscle twitch already at a distance from the nerve and requires less adjustments to the amperage control, while maintaining the visual feedback.



From the alternating sequence of three impulses, the third longer impulse stimulates the nerve already at a distance. One muscle twitch is visible and indicates that the needle is directed to the nerve.



The stimulation needle is further advanced toward the nerve while SENSE maintains the motor response. Current strength adjustments lead to definite reductions of the third impulse.



At the threshold level of approximately 0.3 mA, not one but three muscle twitches are visible as all three impulses stimulate the nerve, thus SENSE allows easier and more reliable nerve localization for better blocks.

# B. Braun Peripheral Nerve Blocks



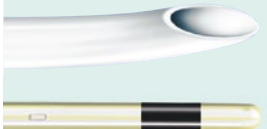
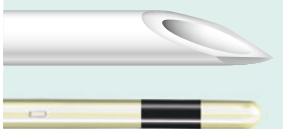
## Product Specifications

Stimuplex® D	ø (G) and Length (inch)	ø and Length (mm)	Sales unit/Pcs.	Code No. (REF)
	Needles with 15° bevel			
	25 G x 1 1/3"	0.5 x 35 mm	25	4894103N
	25 G x 2 1/8"	0.5 x 55 mm	25	4894111N
	23 G x 1 1/2"	0.6 x 40 mm	25	4894120N
	23 G x 2 3/4"	0.6 x 70 mm	25	4894138N
	22 G x 2"	0.7 x 50 mm	25	4894146N
	22 G x 3 1/8"	0.7 x 80 mm	25	4894154N
	22 G x 4 3/4"	0.7 x 120 mm	25	4894162N
	20 G x 6"	0.9 x 150 mm	25	4894170N
	Needles with 30° bevel			
	22 G x 1 1/2"	0.7 x 40 mm	25	4894189N
	22 G x 2"	0.7 x 50 mm	25	4894197N
	22 G x 3 1/8"	0.7 x 80 mm	25	4894200N
Stimuplex® D Plus	ø (G) and Length (inch)	ø and Length (mm)	Sales unit/Pcs.	Code No. (REF)
	Needles with 15° bevel			
	25 G x 1 1/3"	0.5 x 35 mm	25	4894103U
	22 G x 2"	0.7 x 50 mm	25	4894146U
	22 G x 3 1/8"	0.7 x 80 mm	25	4894154U
	22 G x 4 3/4"	0.7 x 120 mm	25	4894162U
	Needles with 30° bevel			
	22 G x 2"	0.7 x 50 mm	25	4894197U
Stimuplex® A	ø (G) and Length (inch)	ø and Length (mm)	Sales unit/Pcs.	Code No. (REF)
	Needles with 30° bevel			
	24 G x 1"	0.55 x 25 mm	25	4894251
	22 G x 1"	0.70 x 25 mm	25	4894539
	22 G x 1 1/8"	0.70 x 35 mm	25	4894367
	22 G x 2"	0.70 x 50 mm	25	4894502
	21 G x 2"	0.80 x 50 mm	25	4894375
	21 G x 4"	0.80 x 100 mm	25	4894260
	20 G x 6"	0.90 x 150 mm	25	4894278
Stimuplex® Ultra	ø (G) and Length (inch)	ø and Length (mm)	Sales unit/Pcs.	Code No. (REF)
	Needles with 30° bevel			
	22 G x 1 3/8"	0.70 x 35 mm	25	4894367U
	22 G x 2"	0.70 x 50 mm	25	4894502U
	22 G x 3 1/8"	0.70 x 80 mm	25	4894279U
	22 G x 4"	0.70 x 100 mm	25	4894260U
	20 G x 6"	0.90 x 150 mm	25	4894278U

Ultraplex®	ø (G) and Length (inch)	ø and Length (mm)	Sales unit/Pcs.	Code No. (REF)
	Needles with 30° bevel			
	22 G x 1 <sup>3</sup> / <sub>8</sub> "	0.70 x 35 mm	25	4894001U
	22 G x 2"	0.70 x 50 mm	25	4894002U
	22 G x 3 <sup>1</sup> / <sub>8</sub> "	0.70 x 80 mm	25	4894003U
	20G x 4"	0.90 x 100 mm	25	4894004U
	20 G x 6"	0.90 x 150 mm	25	4894005U
Contiplex® C Sets	Description	Needle (OD x Length)	Sales unit/Pcs.	Code No. (REF)
	Contiplex® Catheter 1.10 x 0.60 x 188 mm			
	Extension tubing, 2.4 x 1.0 x 300 mm			
	25 G x 7 <sup>1</sup> / <sub>2</sub> ", 15° bevel	0.53 x 190 mm	5	4898115
Contiplex® D	Description	Needle (OD x Length)	Sales unit/Pcs.	Code No. (REF)
	Contiplex® D Needle			
	Contiplex® D, Needle with 15° bevel			
	18 G x 2 <sup>1</sup> / <sub>8</sub> "	1.3 x 55 mm	25	4894219N
	18 G x 3 <sup>1</sup> / <sub>8</sub> "	1.3 x 80 mm	25	4894296N
	18 G x 4 <sup>3</sup> / <sub>8</sub> "	1.3 x 110 mm	25	4894294N
	Contiplex® D, Needle with 30° bevel			
	18 G x 2 <sup>1</sup> / <sub>8</sub> "	1.3 x 55 mm	25	4894227N
Contiplex® D Sets	Description	Needle (OD x Length)	Sales unit/Pcs.	Code No. (REF)
	Contiplex® D Sets			
	Contiplex® Catheter 0.41 x 0.71 x 400 mm			
	with Contiplex® D Needle 20 G x 1 <sup>1</sup> / <sub>3</sub> ", 15° bevel	1.1 x 33 mm	10	4892402N
	with Contiplex® D Needle 20 G x 2 <sup>1</sup> / <sub>8</sub> ", 15° bevel	1.1 x 55 mm	10	4892410N
	Contiplex® Catheter 0.45 x 0.85 x 400 mm			
	with Contiplex® D Needle 18 G x 2 <sup>1</sup> / <sub>8</sub> ", 15° bevel	1.3 x 55 mm	10	4894235N
	with Contiplex® D Needle 18 G x 2 <sup>1</sup> / <sub>8</sub> ", 30° bevel	1.3 x 55 mm	10	4894243N
	Contiplex® Catheter 0.45 x 0.85 x 1000 mm			
	with Contiplex® D Needle 18 G x 3", 15° bevel	1.3 x 80 mm	10	4895819N
	with Contiplex® D Needle 18 G x 4 <sup>3</sup> / <sub>8</sub> ", 15° bevel	1.3 x 110 mm	10	4894391N

# B. Braun Peripheral Nerve Blocks


## Product Specifications

Contiplex® Tuohy Sets	Description	Needle (OD x Length)	Sales unit/Pcs.	Code No. (REF)
	Contiplex® Tuohy Sets			
	Contiplex® Catheter 500mm, 18Gx1½"	1.3 x 40 mm	10	331695N
	Contiplex® Catheter 500mm, 18Gx2"	1.3 x 50 mm	10	331691N
	Contiplex® Catheter 500mm, 18Gx4"	1.3 x 100 mm	10	331693N
	Contiplex® Catheter 1000mm, 18Gx6"	1.3 x 150 mm	10	331694N
Contiplex® S Sets	Description	Needle (OD x Length)	Sales unit/Pcs.	Code No. (REF)
	Contiplex® S Sets			
	Contiplex® Catheter 500mm, 20°, 18Gx2"	1.3 x 50 mm	10	4898750
	Contiplex® Catheter 500mm, 20°, 18Gx4"	1.3 x 100 mm	10	4898752
	Contiplex® Catheter 1000mm, 20°, 18Gx6"	1.3 x 150 mm	10	4898754
Contiplex® Tuohy Ultra Sets	Description	Needle (OD x Length)	Sales unit/Pcs.	Code No. (REF)
	Contiplex® Ultra Catheter 0.45 x 0.85 x 400 mm, sideport adapter, connector, filter PinPad, syringe with cannula 18 G x 1½", 400 mm, isolated Tuohy type	1.3 x 40 mm	10	331695NC
	Contiplex® Ultra Catheter 0.45 x 0.85 x 400 mm, sideport adapter, connector, filter PinPad, syringe with cannula 18 G x 2", 400 mm, isolated Tuohy type	1.3 x 50 mm	10	331691NC
	Contiplex® Ultra Catheter 0.45 x 0.85 x 1000 mm, sideport adapter, connector, filter PinPad, syringe with cannula 18 G x 4", isolated Tuohy type	1.3 x 100 mm	10	331693NC
	Contiplex® Ultra Catheter 0.45 x 0.85 x 1000 mm, sideport adapter, connector, filter PinPad, syringe with cannula 18 G x 6", isolated Tuohy type	1.3 x 150 mm	10	331694NC
Contiplex® S Ultra Sets	Description	Needle (OD x Length)	Sales unit/Pcs.	Code No. (REF)
	Contiplex® Ultra Catheter 0.45 x 0.85 x 400 mm, sideport adapter, connector, filter PinPad, syringe 18 G x 2", 20° bevel	1.3 x 50 mm	10	4898750NC
	Contiplex® Ultra Catheter 0.45 x 0.85 x 1000 mm, sideport adapter, connector, filter PinPad, syringe 18 G x 4", 20° bevel	1.3 x 100 mm	10	4898752NC
	Contiplex® Ultra Catheter 0.45 x 0.85 x 1000 mm, sideport adapter, connector, filter PinPad, syringe 18 G x 6", 20° bevel	1.3 x 150 mm	10	4898754NC

Catheter gauge sizes according to EN ISO 9626



Plexufix®	Description	ø (G) and Length (inch)	ø and Length (mm)	Sales unit/Pcs.	Code No. (REF)
Needle for immobile needle technique according to Winnie	Needle with 45° bevel and extension tube 0.75 x 1.85 x 300 mm				
		24 G x 1"	0.55 x 25 mm	50	4891520
		24 G x 2"	0.55 x 50 mm	50	4891562
	Extension Tube for Plexufix® 0.75 x 1.85 x 230 mm, screwed			50	4891511

Nerve Stimulators	Description	Sales unit/Pcs.	Code No. (REF)
	Stimuplex® HNS 12 nerve stimulator for Stimuplex® and Contiplex® needles	1	4892098

Accessories	Description	Sales unit/Pcs.	Code No. (REF)
for peripheral nerve blocks	Stimuplex® Pen, device for percutaneous nerve mapping	1	4892099
	Electrode cable for Stimuplex® HNS 11/12, length 125 cm	1	4892070
	Electrode cable for Stimuplex® Dig RC, length 150 cm	1	4892917B
	Stimuplex® Remote Control for sterile one-hand operation	1	4892216B
	Knob for sterile handling	1	4892283
	Fingerrings for Stimuplex® Remote Control	1	4892224B
	Suitcase for Stimuplex® HNS 12	1	4892095
	Test resistance for Stimuplex® HNS 12	1	4892096
	Battery cover for Stimuplex® HNS 12	1	4892094

# B. Braun Peripheral Nerve Blocks

## A Great Match for the Continuous Technique: Easypump® C-bloc RA™

### Post-OP and ambulatory pain control

Continuous peripheral nerve blocks are known for their superb post-op pain control. The light weight portable design, combined with excellent pain relieve significantly increases patient satisfaction and compliance with necessary physical therapy.

Easypump® C-bloc RA™ is cost effective as it works without any complicated electronics. There is no need for complex staff training, no hassle with batteries or maintenance and safety checks.

### Separate color-coded filling port:

- Safe and easy filling
- Color coding to help avoid dosage errors

### Smart construction:

- Increased patient comfort
- Strong and reliable
- No complicated electronics
- Completely silent

### Closed system:

- Reduces infection risk and ensures tamper resistance

### User benefits

- Convenient and strong design
- Reliable and silent infusion without complicated electronics
- The closed system reduces infection risk and gives tamper resistance & evidence
- Flexibly adaptable system with the Select-A-Flow™ and OnDemand™ units
- Cost-effective disposable system without consequential costs



### Select-A-Flow (SAF):

#### Always the right basal rate at hand

The basal rate can be adjusted in 7 discrete steps according to the needs of your patients. "Peaks and troughs" are avoided and unscheduled, pain induced contact with the "on-call" physician is minimized.

Safety is an important issue: The detachable key and lockable cover make the Select-A-Flow™ unit tamper evident. The unit comes completely integrated into the closed system of the pump and is not removable – this minimizes the infection risk.



### Select-A-Flow™ unit:

- 7 discrete steps for an ideal basal rate adjustment
- Integrated into the closed Easypump® C-bloc RA™ system

### OnDemand™ Bolus Delivery:

#### Safe and simple bolus administration

The OnDemand™ unit allows your patient to administer a 5 ml bolus once per hour with a subsequent 60 minute lockout period.

Automatic Bolus Delivery (ABD) makes bolus injection simple and convenient. Whereas with other PCA devices the patient must administer the bolus volume manually, the OnDemand™ unit delivers the bolus automatically with the push of a button – without any residual volume. The refill indicator informs your patient when the next bolus can be administered. Just like Select-A-Flow™, the OnDemand™ unit comes completely integrated into the closed Easypump® C-bloc RA™ system – this provides tamper resistance and reduces infection risk.

### Automatic Bolus Delivery:

- Simple bolus injection without residual volume

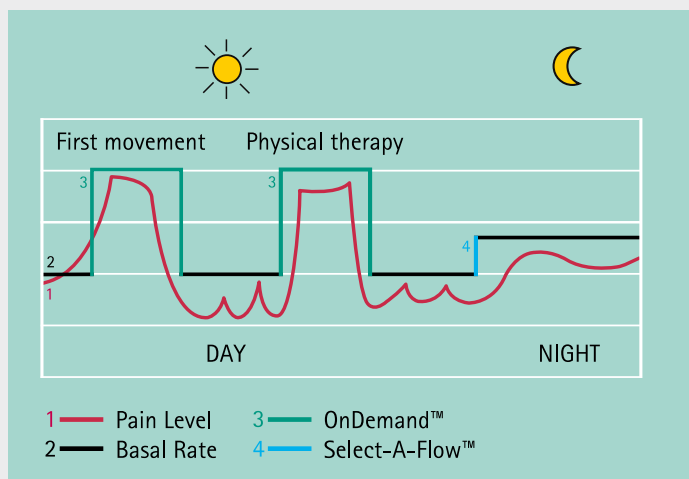
### Refill indicator:

- Indicates to the patient when the next bolus can be administered




### Integrated safety:

- The OnDemand™ unit comes integrated as a part of the closed Easypump® C-bloc RA™ system.



# B. Braun Peripheral Nerve Blocks

## Product Specifications

Easypump® C-bloc RA™	Description	Color Code/ FlowRate	Vol.	Sales unit/Pcs.	Code No. (REF)
	Easypump® C-bloc RA™ Fixed Flow Rate	5 ml/h	400 ml	10	4440003
	Easypump® C-bloc RA™ Fixed Flow Rate	8 ml/h	400 ml	10	4440004
	Easypump® C-bloc RA™ Fixed Flow Rate	10 ml/h	400 ml	10	4440005
	Easypump® C-bloc RA™ Fixed Flow Rate 5 ml/h + OnDemand™ (5 ml Bolus, 60 minutes lock-out period)	= max. 10 ml/h	400 ml	10	4440006
	Easypump® C-bloc RA™ + Select-A-Flow™	2 ml/h – 14 ml/h	400 ml	10	4440007
	Easypump® C-bloc RA™ + Select-A-Flow™ + OnDemand™ (5 ml Bolus, 30 minutes lock-out period)	2 ml/h – 14 ml/h	400 ml	5	4440008
	Easypump® C-bloc RA™ Carry Pouch			1	4434455

Color-coded rings on the filling port indicate the following flow rates: 5 ml/h 8 ml/h 10 ml/h





# B. Braun Continuous Wound Infusion

## Less Pain after Surgery & Faster Recovery – ON-Q® PainBuster®

### With ON-Q® PainBuster® you are redefining recovery

Continuous wound infusion is a technique that delivers local anesthetic through a multi-holed catheter directly into the surgical site for post operative pain relief.

### With ON-Q® and continuous wound infusion, you may expect:

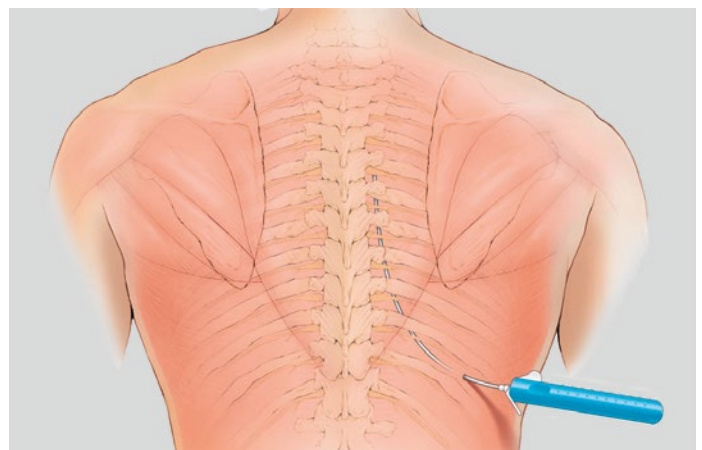
- Quicker return to normal, including ambulation, body functions, and full range of motion<sup>1</sup>
- Decreased complications associated with narcotics – such as respiratory depression, nausea, vomiting, dizziness and constipation<sup>1</sup>
- Clinically proven success – used in thousands of surgeries<sup>1</sup>
- Over 90 % patient satisfaction<sup>1</sup>
- 1 to 3 fewer days in the ICU or hospital<sup>1</sup>
- Up to 30 % reduction in treatment costs<sup>2</sup>

### User benefits

- Reduced hospital stays
- Significantly less narcotics
- Simplicity – no electronics, no maintenance
- Reduction in treatment costs

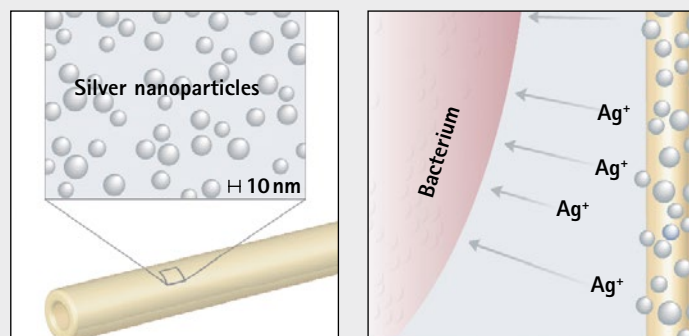


For superb catheter placements a so called "tunneler" is required. The tunneler enables catheter placements in body parts that are usually hard to access



### Soaker Catheter™ features and benefits:

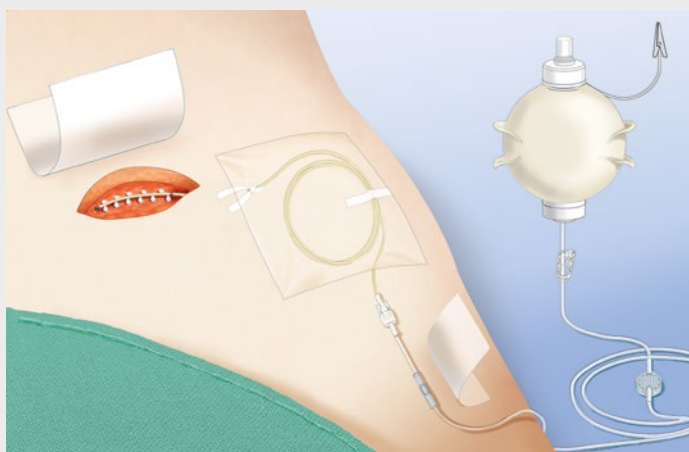
- Unique catheter design with multiple lateral holes along the infusion segment
- Wide range of catheter saturation lengths
- Easy to use introducer needle with peel-away sheath
- Length markings for more accurate positioning
- Dual catheter systems available
- Catheter is treated with a specially formulated antimicrobial silver agent that may destroy or inhibit the growth of micro organisms on the inner and outer surface of the catheter (only SilverSoaker™)



Bacterium attacked by silver ions (Ag<sup>+</sup>s) released by SilvaGard®

ON-Q® SilverSoaker™  
Antimicrobial Catheter

ON-Q® Soaker Catheter™



1 Liu SS, Richman JM, Thirlby RC, Wu CL. Efficacy of Continuous Wound Catheters Delivering Local Anaesthetic for Postoperative Analgesia: A Quantitative and Qualitative Systematic Review of Randomized Controlled Trials. JACS 2006; 203(6): 914-932.

2 Zimberg S. Reducing Pain and Costs with Innovative Postoperative Pain Management, Managed Care Quarterly 2003; 11(1): 34-36.

# B. Braun Continuous Wound Infusion

## Product Specifications

PainBuster®										
Delivery Time Days <sup>3</sup>	Fill Volume (ml)	Flow Rate (ml/h)	Catheter 1 in (2.5 cm)		Catheter 2.5 in (6.5 cm)		Catheter 5 in (12.5 cm)		Catheter 10 in (25 cm)	
			Soaker Catheter™	Silver Soaker™	Soaker Catheter™	Silver Soaker™	Soaker Catheter™	Silver Soaker™	Soaker Catheter™	Silver Soaker™
4	100	1	5001790	–	–	–	–	–	–	–
2	100	2	5001489	–	5001258	5001656	5001473	–	–	–
5	270	2	–	–	5001259	5001793	5001474	–	–	–
2 1/4	270	5	5001490	–	5001260	5001657	5001302	5001659	–	–
3	270	4 (2x2)	–	–	5001275	5001658	5001475	5001660	5001679	5001796
3 1/2	400	5	–	–	5001825	–	5001456	5001794	5001680	5001797
2	400	10	–	–	5001823	–	5001457	–	–	–
4	400	4 (2x2)	–	–	5001455	–	5001458	5001795	–	–

<sup>3</sup> Delivery time is approximate and based on nominal specifications. See Instructions For Use for complete product information.

All cases include 5 PainBuster® kits

and each kit includes:

- Infusion pump
- 60 ml filling syringe
- E-clip or carry case
- Soaker Catheter(s)™
- 17 G T-peel introducer(s) and sheath(s)
- 5 ml priming syringe
- Medication label
- Peel-Away labels
- Patient guidelines
- Instructions for use
- Filling extension set – 400 ml models only

Expansion Kits <sup>5</sup>	Code No. (REF)
ON-Q® Soaker Catheter™ 2.5 cm (1")	5001731
ON-Q® Soaker Catheter™ 6.5 cm (2.5")	5001729
ON-Q® Soaker Catheter™ 12.5 cm (5")	5001730
ON-Q® Soaker Catheter™ 25 cm (10")	5001732
ON-Q® SilverSoaker™ 2.5 cm (1")	5001710
ON-Q® SilverSoaker™ 6.5 cm (2.5")	5001708
ON-Q® SilverSoaker™ 12.5 cm (5")	5001709
ON-Q® SilverSoaker™ 19.1 cm (7.5")	5001818
ON-Q® SilverSoaker™ 25 cm (10")	5001711

<sup>5</sup>Contents: Soaker catheter(s), T-peel needle(s), 5cc priming syringe, Tegaderm™ and Steri-Strips™

PainBuster® Accessories			
PainBuster® Accessories	Code No. (REF)	Disposable Tunnelers <sup>6</sup>	Code No. (REF)
Soaker introducer needle 3.25" (8.3 cm)	5001402	Disposable tunneler 3.25" (8.25 cm), 17G	5001685
Soaker introducer needle 6" (15.2 cm)	5001430	Disposable tunneler 5" (12.5 cm), 17G	5001687
Soaker introducer needle 8" (20.3 cm)	5001429	Disposable tunneler 8" (20.3 cm), 11G	5001763
Filling extension set	5001439	Disposable tunneler 8" (20.3 cm), 17G	5001689
		Disposable tunneler 12" (30.5 cm), 11G	5001765
		Disposable tunneler 12" (30.5 cm), 16G	5001761

<sup>6</sup>Contents: Tunneler and two disposable sheaths









