



B. BRAUN REGIONAL ANESTHESIA PORTFOLIO PRODUCT CATALOG

Reach your Targets quicker

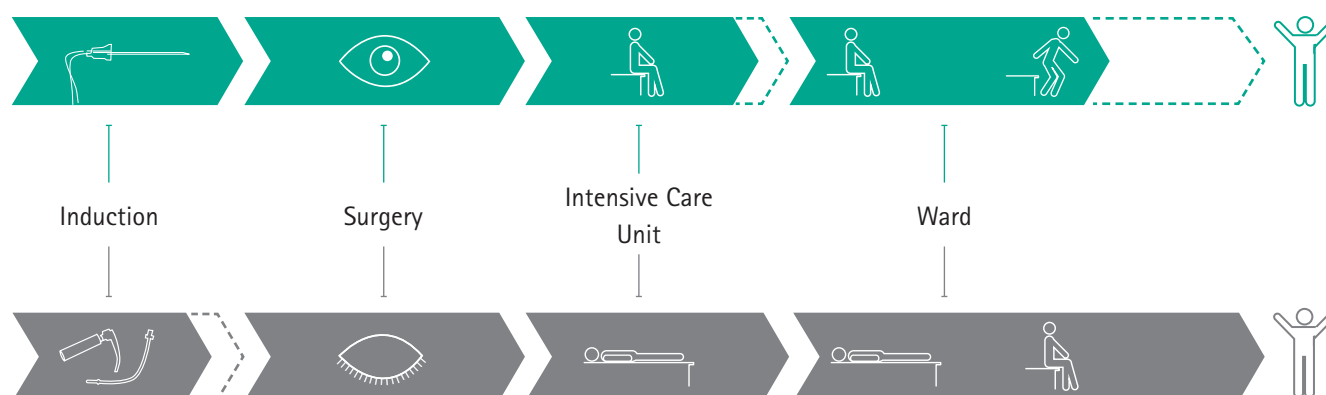
Thanks to Regional Anesthesia

OPTIMIZE PROCESSES

Regional anesthesia is an essential part of pain therapy, as across several interventions, it offers clear advantages when compared to general anesthesia.¹ For regional anesthesia to become an important part of the peri-operative process, there are some prerequisites to consider, like the relevant indications, skilled personnel and the necessary internal processes at the clinic.

The rapid growth of use of regional anesthesia and the numerous publications on the topic are both a testament to how regional anesthesia can have a positive impact on both patient outcome and on efficiencies for the clinic.^{2,3}

WITH REGIONAL ANESTHESIA

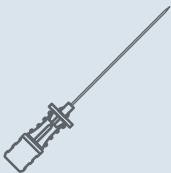
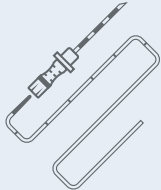
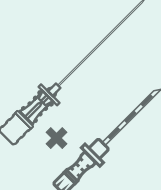
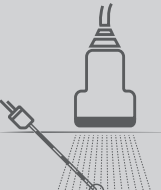


WITHOUT REGIONAL ANESTHESIA

COMPARING TWO POTENTIAL INTERVENTIONS WITH AND WITHOUT REGIONAL ANESTHESIA:

Looking holistically across the patient pathway, the establishment of regional anesthesia processes appears to be a favorable investment. When regional anesthesia is used, patients see better outcomes, faster mobilization and consequently earlier discharge.^{4,5}

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<p>ULTRASOUND GUIDANCE</p> <p>Xperius® Onvision®</p>		<p>ULTRASOUND GUIDANCE</p>

Pain Therapy with Regional Anesthesia

Supported by B. Braun's Product Portfolio

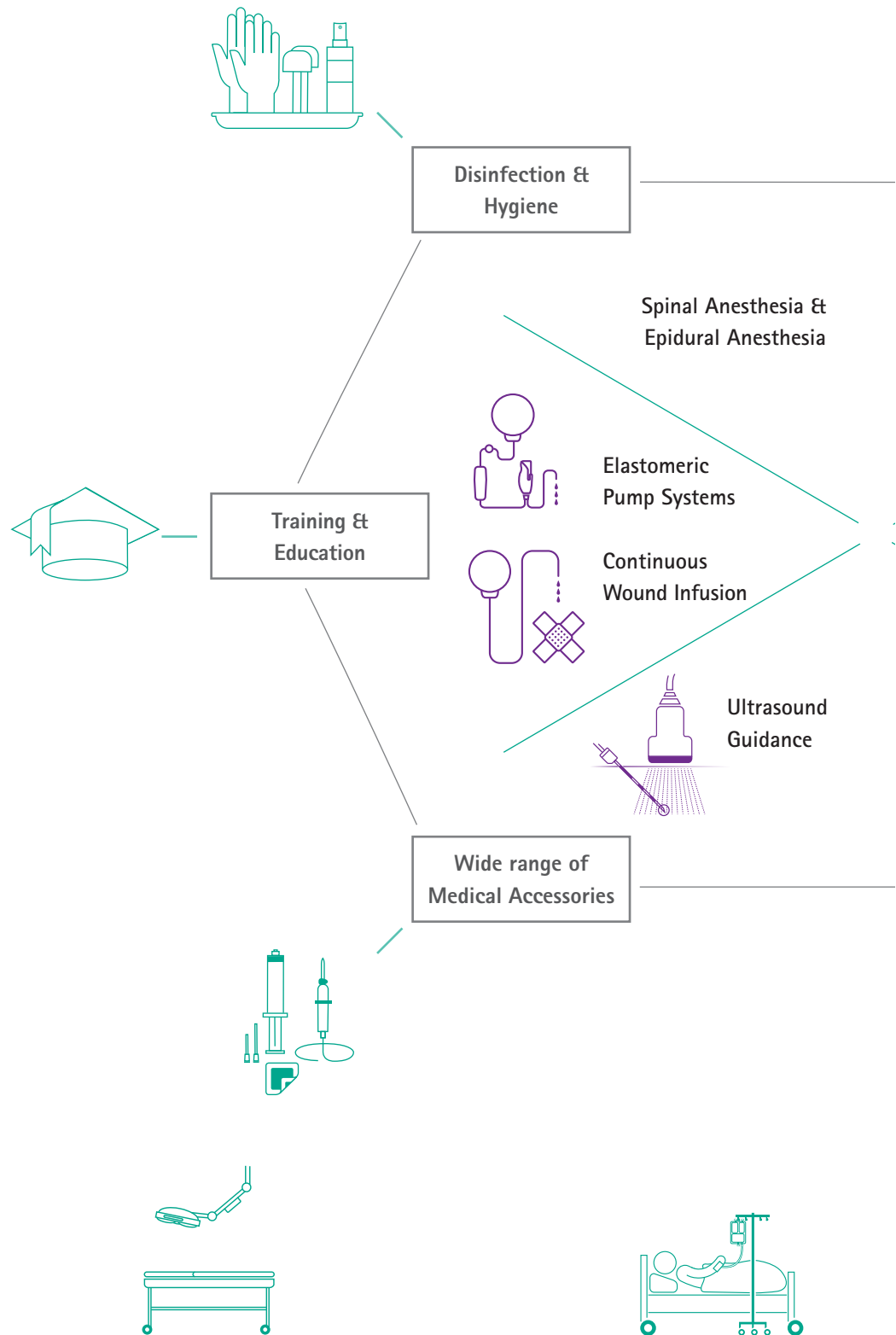
B. BRAUN – A COMPETENT PARTNER

As one of the world's major providers in the area of regional anesthesia, B. Braun supports its customers with innovative products and services.

We strive to accompany our customers through the entire patient pathway helping to optimize their processes and to provide products adapted to day-to-day clinical needs.

SYSTEM PARTNER IN REGIONAL ANESTHESIA

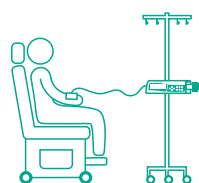
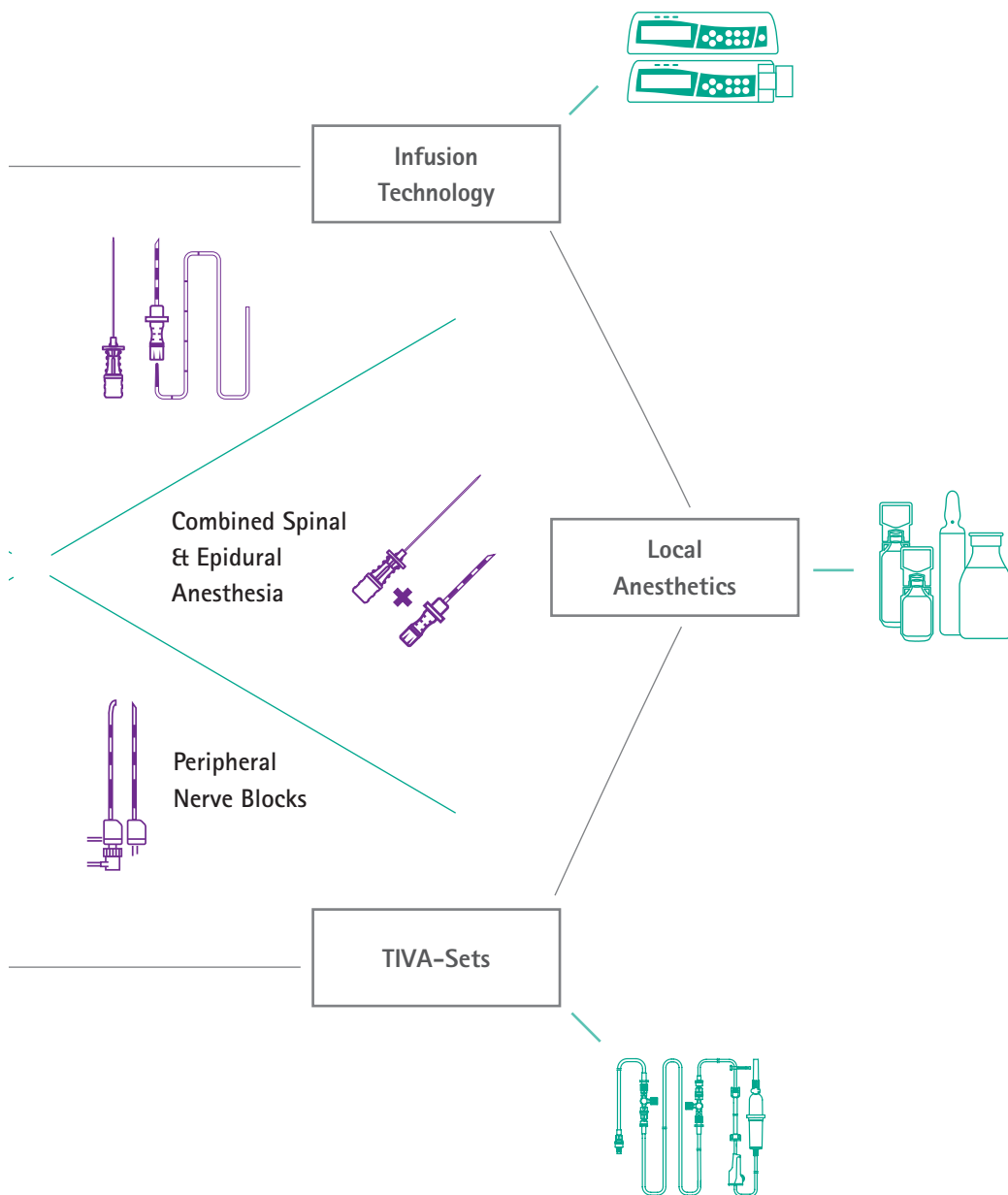
B. Braun, as a true system partner, helps to stay on top of evolving standards and their realization across multiple stakeholders, e.g. nurses, pharmacists and anesthetists. With access to our comprehensive product portfolio in pain therapy and through constructive dialog, our partners can benefit from B. Braun's know-how and expertise.



Introduction

Surgery

Recovery Room



Due to the combination of different procedures a broad regional anesthesia spectrum is created, which covers all patient areas.

Ward

Reducing Risks of Misconnections in Regional Anesthesia with NRFit®

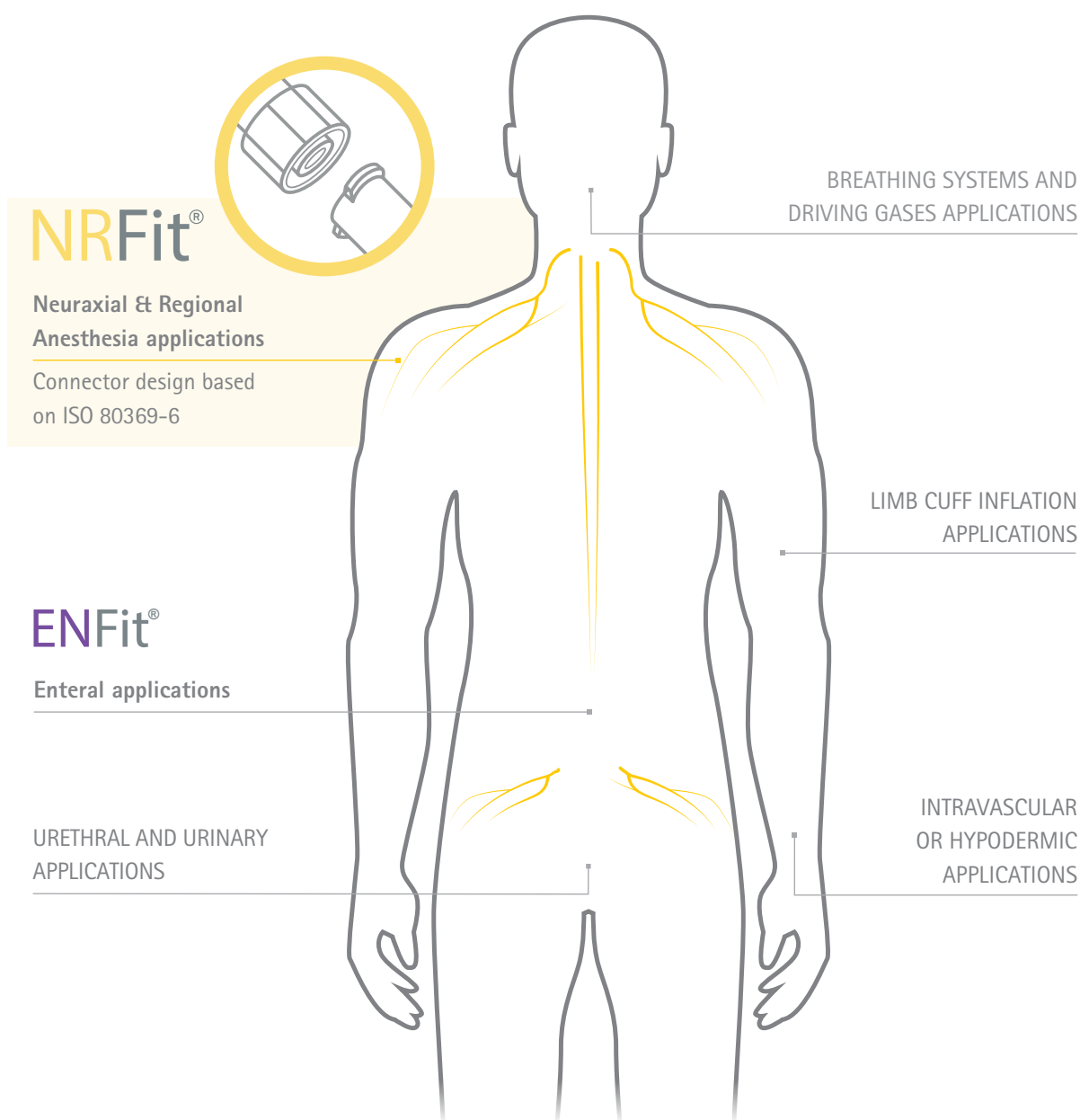
MEDICAL DEVICE CONNECTORS FOR NEURAXIAL
& REGIONAL ANESTHESIA APPLICATIONS
ARE CHANGING TO MEET INTERNATIONAL
DESIGN STANDARDS: ISO 80369-6.⁶

Regional Anesthesia products with NRFit® connector

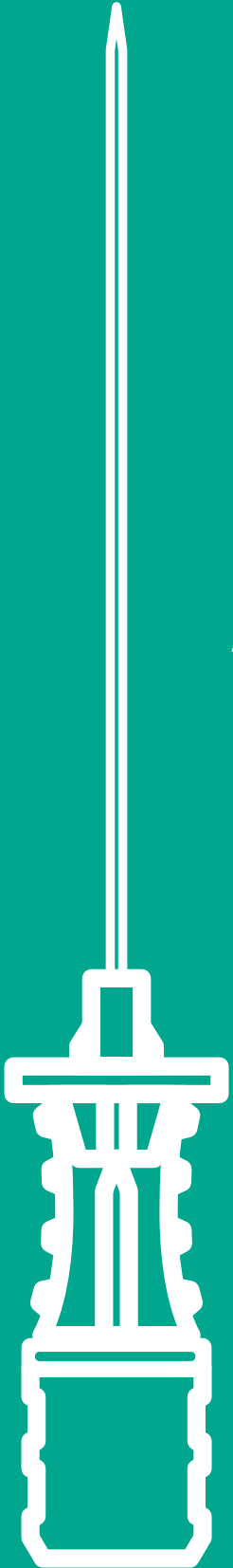
In line with the ISO Standard (International Organization for Standardization) for neuraxial and regional anesthesia devices, B. Braun has developed a comprehensive portfolio with NRFit® connectors for the corresponding process steps.

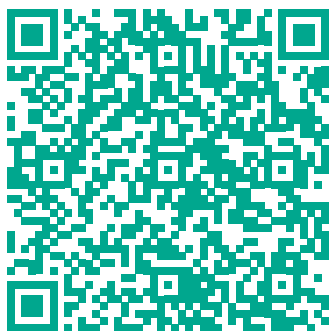
Connecting what belongs together

» The ISO has identified several medical application areas for which specific ISO standards have been developed. These standards are part of the ISO 80369 series. Each standard will provide design and performance specifications for these connectors. ¹

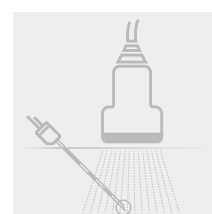
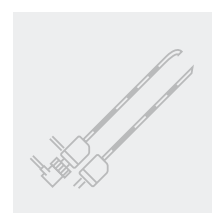
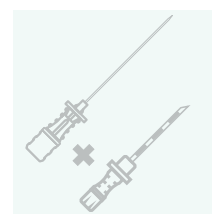
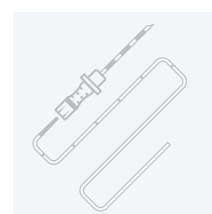
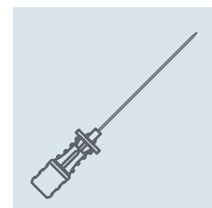


SPINAL ANESTHESIA





A comprehensive portfolio of
needles in different bevel types
for spinal anesthesia.



Products for Spinal Anesthesia

Quality and Practicality



Ergonomic hub design for an individual and safe handling position, better control of the needle and easy verification of bevel eye orientation.⁷

Thanks to our years of

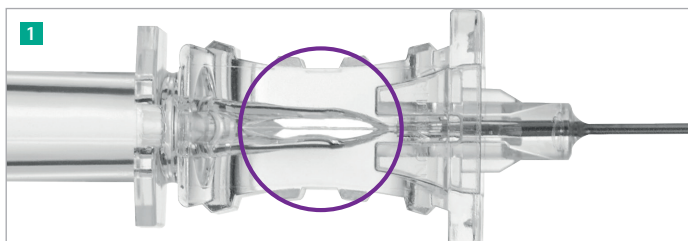
EXPERIENCE

in the field, B. Braun offers spinal needles with a range of bevel types.

Spinocan® and Pencan® are well accepted for their

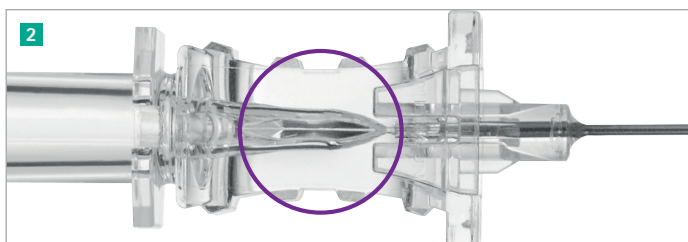
INNOVATIVE

needle tip designs.



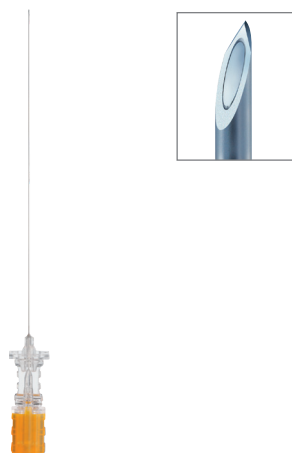
CSF-flashback identification

due to the incorporated prism effect.



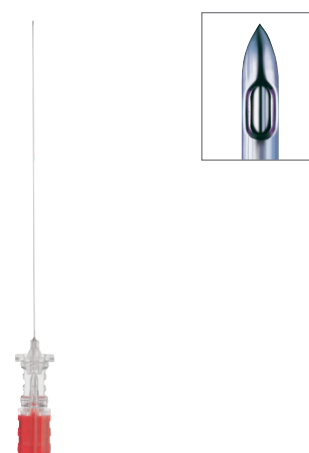
CSF FLASHBACK IDENTIFICATION

- Prism has a silver shine before CSF enters the hub **1**
- Prism turns transparent once CSF is in the hub **2**



Spinocan® with Quincke Bevel

- Sharp bevel for low puncture force⁷
- Fitted stylet: to reduce the risk of tissue coring and potential epidermoid tumor development
- Prism included in the spinal needle hub, supports identification of CSF flashback



Pencan® with Pencil Point Bevel

- Pencil point tip and opening design allows avoidance of incomplete blocks and helps reduce PDPH⁸
- Minimal intrathecal penetration depth⁷
- Identification of tissue structures due to detectable dura click^{7,9}
- Prism included in the spinal needle hub, supports identification of CSF flashback


























Spinal Introducer Needle


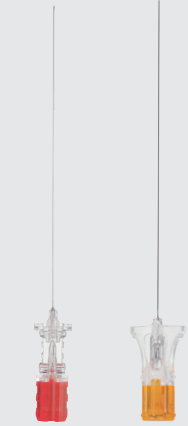













- Introducer needles providing needle guidance for the spinal needle during puncture⁷
 - Introducer OHD range (as shown on left side)
 - Introducer NHD range (as shown on right side)

Portfolio Overview

SPINAL NEEDLES




Spinocan®	Color code	Size (G) / Length (inch)	ø / Length (mm)	Units per box	Code no. (REF) OHD Luer	Code no. (REF) NHD Luer	Code no. (REF) NRFit®
  OHD/NRFit® NHD		29 x 3 ½"	0.35 x 88*	25	4501900	4501900-13	4501900N-01
		27 x 3 ½"	0.40 x 88		4503902	4503902-01	4503902N-01
		26 x 3 ½"	0.45 x 88		4502906	4502906-01	4502906N-01
		25 x 3"	0.55 x 75		4505751	4505751-01	4505751N-01
		25 x 3 ½"	0.55 x 88		4505905	4505905-01	4505905N-01
		23 x 3 ½"	0.65 x 88		4506014	-	-
		22 x 1 ½"	0.70 x 40		4507401	4507401-13	4507401N-01
		22 x 3"	0.70 x 75		4507754	4507754-13	4507754N-01
		22 x 3 ½"	0.70 x 88		4507908	4507908-01	4507908N-01
		20 x 3"	0.90 x 75		4509757	4509757-13	4509757N-01
		20 x 3 ½"	0.90 x 88		4509900	4509900-01	4509900N-01
		19 x 1 ½"	1.10 x 40		4501144	4501144-13	4501144N-01
		19 x 3 ½"	1.10 x 88		4501195	4501195-13	4501195N-01
		18 x 3"	1.30 x 75		4501373	4501373-13	4501373N-01
		18 x 3 ½"	1.30 x 88		4501390	4501390-01	4501390N-01
Long Length							
	29 x 4 ¾"	0.35 x 120	25	4501918	4501918-13	4501918N-01	
	27 x 4 ¾"	0.40 x 120		4502140	4502140-13	4502140N-01	
	26 x 4 ¾"	0.45 x 120		4504917	4504917-13	4504917N-01	
	25 x 4 ¾"	0.55 x 120		4505913	4505913-13	4505913N-01	
	22 x 4 ¾"	0.70 x 120		4506090	4506090-13	4506090N-01	
	22 x 6"	0.70 x 150		-	-	4506095N-01	

SPINAL NEEDLES

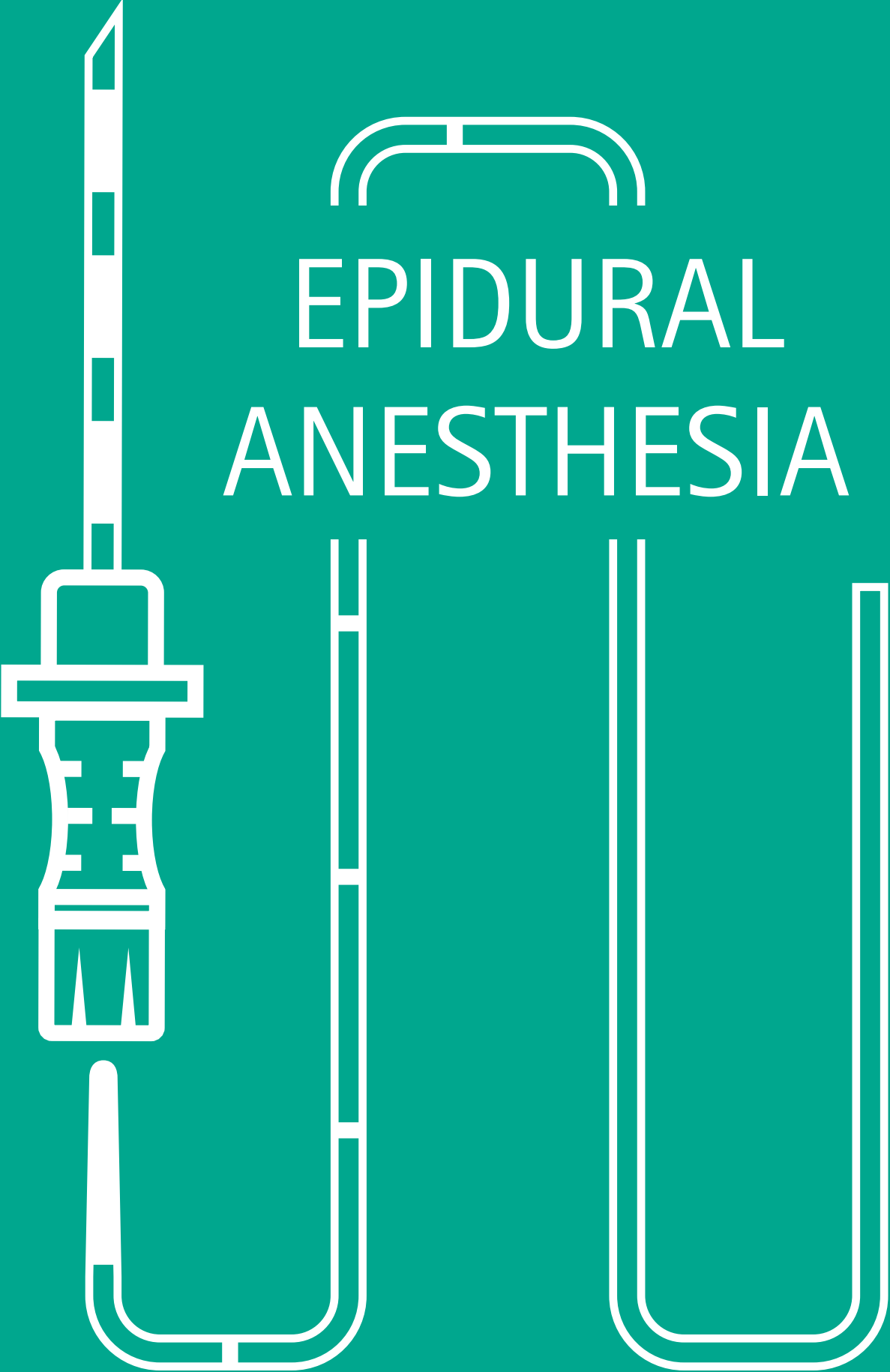
Pencan®	Color code	Size (G)/ Length (inch)	ø/Length (mm)	Units per box	Code no. (REF) OHD Luer	Code no. (REF) NHD Luer	Code no. (REF) NRFit®
  OHD /NRFit® NHD		27 x 3 ½"	0.40 x 88	25	4502027	4502027-01	4502027N-01
					4502051*	4502051-13*	4502051N-01*
		25 x 3 ½"	0.50 x 88		4502019	4502019-01	4502019N-01
					4502043*	4502043-13*	4502043N-01*
		22 x 3 ½"	0.70 x 88		4502035	4502035-13	4502035N-01
Long Length							
 OHD /NRFit® NHD		27 x 4"	0.40 x 103	25	4502124*	4502124-13*	4502124N-01*
		27 x 4 ¾"	0.40 x 120		4502132*	4502132-13*	4502132N-01
		25 x 4"	0.50 x 103		4502116*	4502116-13*	4502116N-01*
		25 x 4 ¾"	0.50 x 120		-	4502120-13*	4502120N-01
		25 x 6.1"	0.50 x 156		-	-	333877N-01
	Pencan® Paed						
 OHD /NRFit® NHD		27 x 2"	0.40 x 50	25	4502175	4502175-13	4502175N-01
		25 x 1"	0.50 x 25		4502167	4502167-13	4502167N-01
		25 x 2"	0.50 x 50		4502159	4502159-13	4502159N-01

*with Spinal Introducer Needle (Luer)

INTRODUCER

Spinal Introducer Needles (for Spinocan® and Pencan®)	Color code	Size (G)/ Length (inch)	ø/Length (mm)	Units per box	Code no. (REF) OHD Luer	Code no. (REF) NHD Luer	Code no. (REF) NRFit®
 OHD NHD	For Spinal Needles 29 G and 27 G						
		22 x 1 3/8"	0.70 x 35	25	4500059*	4500059-13*	4500059*
	For Spinal Needles 26 G and 25 G						
		20 x 1 3/8"	0.90 x 35	25	4505000*	4505000-13*	4505000*

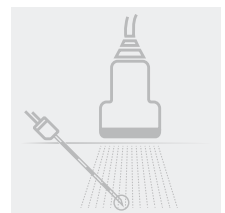
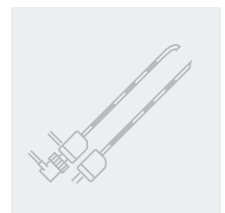
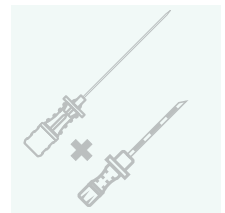
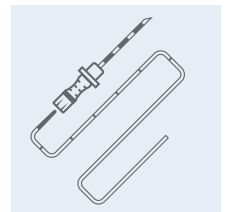
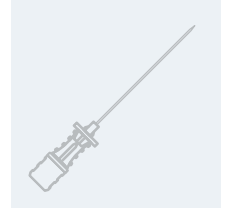
*Introducer in Luer



EPIDURAL ANESTHESIA



To meet individual preferences,
B. Braun offers a broad range of
epidural cannulas, catheters and
accessories for epidural anesthesia.



Products for Epidural Anesthesia

Quality and Practicality



Adapting to the unique anatomical challenges of each patient, it is important to use the appropriate needle and accessories.

B. Braun focuses on

QUALITY & PRACTICALITY.



Perican® Tuohy Needles

- For both continuous and single-shot techniques
- Different needle sizes (16 G, 18 G, 20 G)
- With 1 cm graduation in length
- Polished inner bevel edge to reduce the risk of catheter shearing

USER BENEFITS:

- 1 cm marking to control the insertion depth
- High bending stiffness for good control during needle advancement
- Fitted stylet: to reduce the risk of tissue coring and potential epidermoid tumor development

Products for Epidural Anesthesia

Perifix® Catheters: Available with different characteristics – Standard, Soft-Tip and ONE



Perifix® Standard Catheter

- Relatively stiff catheter shaft for easy catheter insertion
- Length 1000 mm
- Standard catheter with a central opening or three micro-holes to enhance the spread
- Clear blue length markings embedded in catheter material
- Does not contain latex, DEHP or PVC
- MRI suitable



Perifix® Soft-Tip Catheter

- Soft-Tip catheter with a superimposed tip
- Length 1000 mm
- Three micro-holes enhance the spread of anesthetic drug
- Clear blue length markings embedded in catheter material
- Does not contain latex, DEHP or PVC
- MRI suitable



Perifix® ONE

- Epidural catheter with a relatively stiff but flexible shaft and a soft, atraumatic tip
- Length 1000 mm
- Six micro-holes enhance the spread of anesthetic drug
- Three yellow barium sulphate stripes allowing x-ray control
- Does not contain latex, DEHP or PVC
- MRI suitable

Products for Epidural Anesthesia

Perifix® Accessories



Perifix® LOR-Syringe

- Easy-gliding plunger with good gliding characteristics and safety stop
- Parabolic graduation to differentiate it from conventional syringes
- Suitable for air and saline applications
- Lock or slip connection



Perifix® Catheter Connector

- Available in two sizes (19 G and 20/24 G)
- Tactile and acoustic feedback upon closure
- Viewing window allows for catheter insertion control to ensure a successful connection



Perifix® Filter with PinPad

- Filter fixation on patient in combination with self-adhesive PinPad
- Filter reduces the risk of bacterial infections
- Pressure resistant up to 7 bar



Perifix® Catheter Fixation

- Catheter fixation, consisting of fixation ring and non-woven cover foil
- Easy examination of puncture site due to exchangeable cover foils

Products for Epidural Anesthesia

Epidural Anesthesia for the smallest patients



Perican® Paed Epidural Needles

- Tuohy bevel
- For continuous or single-shot techniques
- Three different needle sizes (18 G, 20 G, 22 G)
- 5 mm markings to control the insertion depth
- Fitted stylets: to reduce the risk of tissue coring and potential epidermoid tumor development



Epican® Paed - Caudal Needles

- 45° Crawford type bevel for caudal pediatric anesthesia
- Three different needle sizes (20 G, 22 G, 25 G)
- Special length (30 mm, 35 mm, 50 mm)
- 5 mm markings to control the insertion depth
- Fitted stylets: to reduce the risk of tissue coring and potential epidermoid tumor development



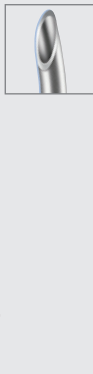







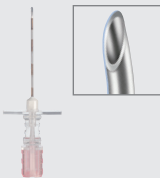







Perifix® ONE Paed Epidural Sets

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

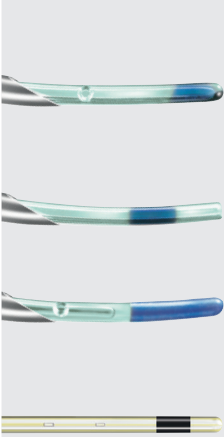
- Catheters with distance markings for pediatric use
- For safe catheter insertion and position control
- Catheter with markings each 1 cm in the space between 2 and 20 cm from the needle tip

Portfolio Overview




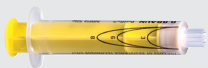




EPIDURAL NEEDLES

Perican®	Color code	Size (G)/Length (inch)	ø/Length (mm)	Units per box	Code no. (REF) Luer	Code no. (REF) NRFit®
		18 x 3 1/4"	1.30 x 80	25	4512383	4512383N-01
		17 x 3 1/4"	1.50 x 80		4512588	-
		16 x 3 1/4"	1.70 x 80		4512782	4512782N-01
	Long Length					
		18 x 4 3/4"	1.30 x 120	25	4512453	4512453N-01
		18 x 6"	1.30 x 150		4512200	4512200N-01
		16 x 4 3/4"	1.70 x 120		-	4512785N-01
		16 x 6"	1.70 x 150		-	4512784N-01
Perican® Paed	Color code	Size (G)/Length (inch)	ø/Length (mm)	Units per box	Code no. (REF) Luer	Code no. (REF) NRFit®
		22 x 2"	0.73 x 50	25	4502078	4502078N-01
		20 x 2"	0.90 x 50		4502094	4502094N-01
		18 x 2"	1.30 x 50		4502302	4502302N-01
Epican® Paed Caudal	Color code	Size (G)/Length (inch)	ø/Length (mm)	Units per box	Code no. (REF) Luer	Code no. (REF) NRFit®
		25 x 1 1/8"	0.53 x 30	25	4502400	4502400N-01
		22 x 1 3/8"	0.73 x 35		4502418	4502418N-01
		20 x 2"	0.90 x 50		4502426	4502426N-01

EPIDURAL CATHETERS

Perifix® catheter	Catheter ø outer/inner/ Length (mm) (G)	Suitable for Perican® Size (G)	Units per box	Code no. (REF) Luer	Code no. (REF) NRFit®
	Perifix® Standard catheter (with 3 lateral eyes)				
	1.05/0.60/ 1000 (19)	16	25	4513258	4513258N-01
	0.85/0.45/ 1000 (20)	18		4513150	4513150N-01
	Perifix® Standard catheter (with central opening)				
	0.85/0.45/ 1000 (20)	18	25	4513177	4513177N-01
	Perifix® Soft Tip catheter (with 3 lateral eyes)				
	0.85/0.45/ 1000 (20)	18	25	4515048	4515048N-01
	Perifix® ONE catheter (with 6 lateral eyes)				
	1.05/0.60/ 1000 (19)	16	25	4513258C	45132581N-01
	0.85/0.45/ 1000 (20)	18		4513150C	45131501N-01


EPIDURAL ANESTHESIA ACCESSORIES

Perifix® Catheter Fixation	Description	Units per box	Code no. (REF)	
	Perifix® catheter fixation, consisting of a fixation ring and a non-woven cover foil	25	4511200	
	Perifix® non-woven replacement cover foil		4511201	
Perifix® Loss-of-Resistance (LOR) Syringe	Description	Units per box	Code no. (REF) Luer	
 	Perifix® LOR Syringe, Luer-Slip	25	4637100	
	Perifix® LOR Syringe, Luer-Lock		4638107	
Perifix® Loss-of-Resistance (LOR) Syringe NRFit®	Description	Units per box	Code no. (REF) NRFit®	
 	Perifix® LOR Syringe, Slip NRFit®	25	4637110	
	Perifix® LOR Syringe, Lock NRFit®		4638110	
Perifix® catheter connector	Size (G)	Units per box	Code no. (REF) Luer	Code no. (REF) NRFit®
	19	25	4513801	4513801N-01
	20 / 24		4513800	4513800N-01
Perifix® filter	Particle filter (µm)	Units per box	Code no. (REF) Luer	Code no. (REF) NRFit®
	0.20	25	4515501	4515501N-01
Perifix® PinPad	Description	Units per box	Code no. (REF)	
	Perifix® PinPad Filter Fixation	25	4515510	

Regional Anesthesia Products with NRFit®






Product specifications

EPIDURAL CATHETERS

Perifix® catheter	Catheter ø outer/inner/ Length (mm) (G)	Suitable for Perican® Size (G)	Units per box	Code no. (REF)
	Perifix® Standard catheter (with 3 lateral eyes)			
	1.05/0.60/1000 (19)	16	25	4513258N-01
	0.85/0.45/1000 (20)	18		4513150N-01
	Perifix® Standard catheter (with central opening)			
	0.85/0.45/1000 (20)	18	25	4513177N-01
	Perifix® Soft Tip catheter (with 3 lateral eyes)			
	0.85/0.45/1000 (20)	18	25	4515048N-01
	Perifix® ONE catheter (with 6 lateral eyes)			
	1.05/0.60/1000 (19)	16	25	45132581N-01
	0.85/0.45/1000 (20)	18		45131501N-01

Catheter gauge sizes according to EN ISO 9626

ACCESSORIES & COMPLEMENTARY PORTFOLIO

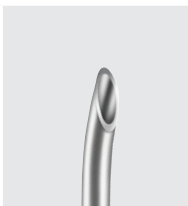
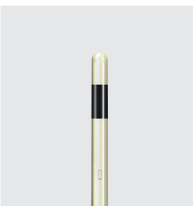




Sterifix® filter straws	Particle filter (µm)		Length (cm)	Units per box	Code no. (REF)
	5		4.5	50	4550250N
	5		10		4550200N
Sterifix® filter needle	Size (G)	Particle filter (µm)	Length (cm)	Units per box	Code no. (REF)
	19	5	3.8	50	4550404N
Perifix® catheter connector	Size (G)		Units per box	Code no. (REF)	
	19		50	4513801N-01	
	20 / 24			4513800N-01	
Perifix® filter	Particle filter (µm)		Units per box	Code no. (REF)	
	0.2		25	4515501N-01	







ACCESSORIES & COMPLEMENTARY PORTFOLIO

Infusomat® Space Line	Length (cm)	Units per box	Code no. (REF)
	300	100	8700132SP
Original Perfusor® Line	Length (cm)	Units per box	Code no. (REF)
	200	25	8722865
Omnifix®	Filling volume (ml)	Units per box	Code no. (REF)
	Slip NRFit®		
	1	100	9164001
	3		4616003
	5		4616005
	10		4616014
	20		4616021
	Lock NRFit®		
	3	100	4617003
	5		4617006
	10		4617014
	20		4617021
	50		4617508F-01
Perifix® LOR syringe	Units per box		Code no. (REF)
	Slip NRFit®		
	25		4637110
	Lock NRFit®		
25		4638110	

Portfolio Overview

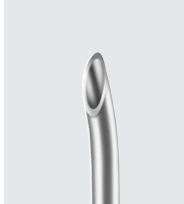
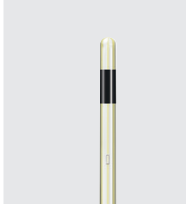
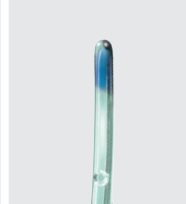


SETS FOR EPIDURAL ANESTHESIA (LUER)







Perican® Tuohy epidural needles <div><div>20 G ø 0.90 mm / Length 50 mm</div><div>18 G ø 1.30 mm / Length 80 mm</div><div>18 G ø 1.30 mm / Length 50 mm (Paed Set)</div><div>16 G ø 1.70 mm / Length 80 mm</div></div>											
		Perican® Tuohy epidural needle		Perifix® ONE epidural catheter, 6 lateral eyes		Perifix® epidural catheter, 3 lateral eyes		central opening	3 lateral eyes	Perifix® Loss-of-Resistance (LOR) syringe, Luer-Slip	
		50/80 mm	120 mm	24 G	20 G	19 G	20 G	19 G	20 G	20 G	
Complete Sets	Type	Perican®		Perifix® ONE		Perifix® Standard			Perifix® Soft Tip	Perifix® LOR	
	Perifix® Standard catheter										
	Perifix® 420	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>				
	Perifix® 421	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	
	Perifix® 430	<input type="checkbox"/>						<input checked="" type="checkbox"/>			
	Perifix® 431	<input type="checkbox"/>						<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
	Perifix® 620	<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>		
	Perifix® Soft Tip catheter										
	Perifix® 900	<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>		
	Perifix® 901	<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Perifix® ONE catheter										
	Perifix® ONE420	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>						
	Perifix® ONE421	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	
	Perifix® ONE431	<input type="checkbox"/>				<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	
	Filter Sets										
		Perifix® Standard catheter									
Perifix® 400		<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>				
Perifix® 401		<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	
Perifix® 402		<input type="checkbox"/>						<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Perifix® 451		<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	
Perifix® Soft Tip catheter											
Perifix® 700		<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>		
Perifix® 701		<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Perifix® 730		<input type="checkbox"/>							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Perifix® 750		<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Perifix® ONE catheter											
Perifix® ONE400		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>						
Perifix® ONE401		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	
Perifix® ONE402		<input type="checkbox"/>				<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	
Perifix® ONE418			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	
Perifix® ONE451	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>		
Pediatric Filter Sets											
	Perifix® ONE Paed										
	Perifix® ONE Paed 18	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	
	Perifix® ONE Paed 20	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	
Mini Sets											
	Perifix® Standard catheter										
	Perifix® 100	<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>		
	Perifix® 300	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>				
	Perifix® 301	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	
	Perifix® 302	<input type="checkbox"/>						<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
	Perifix® 310	<input type="checkbox"/>						<input checked="" type="checkbox"/>			

						* Sterican® needles 25 G Length 16 mm, ø 0.50 mm 21 G Length 40 mm, ø 0.80 mm 18 G Length 40 mm, ø 1.20 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 0.20 µm pressure resistant up to 7 bar	Perifix® PinPad filter fixation	Perifix® catheter connector	Sales unit/Pcs.	Code no. (REF) Luer
						10	4514203
							4514211
							4514300
							4514319
							4516206
						10	4510291
							4510305
						10	4514203C
							4514211C
							4514319C
						20	4514009
							4514017
							4514025
							4514513
						20	4510216
							4510097
							4517309
							4517504
						20	4514009C
							4514017C
							4514025C
							4514183C
							4514513C
						10	4512006C
							4512014C
						20	4511000
							4513002
							4513010
							4513029
							4513100

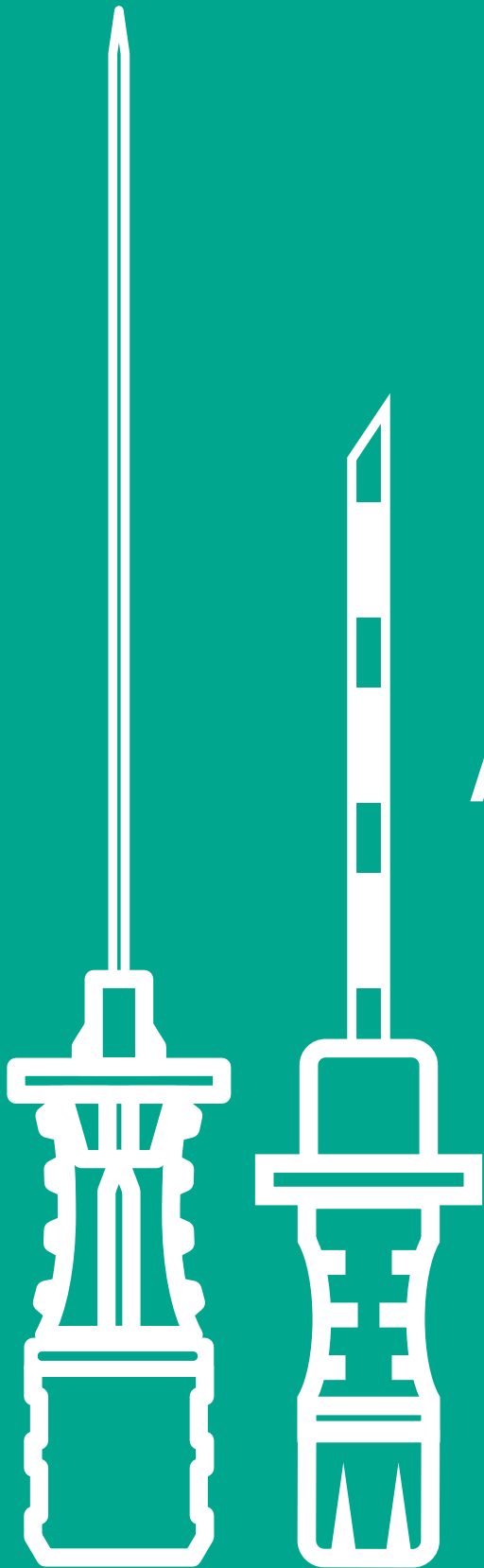
Portfolio Overview

SETS FOR EPIDURAL ANESTHESIA (NRFit®)

Legend <div><div></div>20 G x 2", ø 0.90 x 50 mm</div> <div><div></div>18 G x 3 ¼", ø 1.30 x 80 mm,</div> <div><div></div>18 G x 2", ø 1.30 x 50 mm (Paed Set)</div> <div><div></div>16 G x 3 ¼", ø 1.70 x 80 mm</div>										
	Perican® Tuohy needle	Perifix® ONE epidural catheter, 6 lateral eyes	Perifix® epidural catheter, 3 lateral eyes	Perifix® Soft Tip epidural catheter, 3 lateral eyes	Perifix® Loss of Resistance syringe					
	50 mm	80 mm	24 G	20 G	19 G	20 G	19 G	20 G		
Set versions	Perican® with NRFit®		Perifix® ONE with NRFit®			Perifix® Standard with NRFit®		Perifix® Soft Tip with NRFit®		Perifix® LOR with NRFit®
Complete Sets										
Perifix® Standard catheter										
Perifix® 421										
Perifix® Soft Tip catheter										
Perifix® Soft Tip 901										
Perifix® ONE catheter										
Perifix® ONE 421										
Filter Sets										
Perifix® Standard catheter										
Perifix® 400										
Perifix® 401										
Perifix® 402										
Perifix® Soft Tip catheter										
Perifix® Soft Tip 701										
Perifix® Soft Tip 730										
Perifix® ONE catheter										
Perifix® ONE 401										
Perifix® ONE 402										
Pediatric Sets										
Perifix® ONE Paed										
Perifix® ONE Paed 18										
Perifix® ONE Paed 20										
Mini Set										
Perifix® Standard catheter										
Perifix® 300										

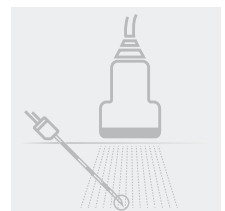
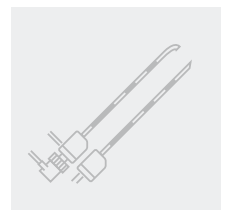
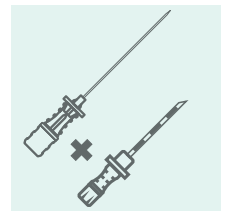
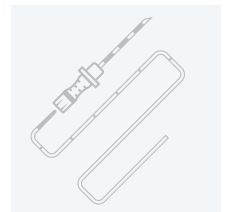
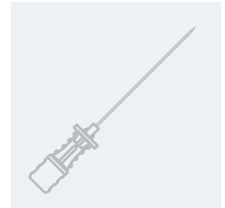
						<p>* Sterican® needles</p> <p>25 G, 16 mm, ø 0.50 mm</p> <p>21 G, 40 mm, ø 0.80 mm</p> <p>18 G, 40 mm, ø 1.20 mm</p> <p>Caution: Hypodermic needles (for skin infiltration) stay Luer</p>	
Omnifix® three part syringe, 20 ml, Lock, Sterifix® filter needle	Omnifix® three part syringe, 3 ml, Lock, Sterifix® filter needle	Perifix® Filter 0.20 µm, pressure resistant up to 7 bar	Perifix® catheter connector 19 G or 20/24 G	Perifix® PinPad filter fixation	Omnifix® three part syringe, 3ml, Luer Lock, 3 hypodermic Luer needles*		
Omnifix® and Sterifix® with NRFit®	Omnifix® and Sterifix® with NRFit®	Perifix® Filter with NRFit®	Perifix® catheter connector with NRFit®	Perifix® PinPad	Omnifix® and hypodermic needles with Luer	Units per box	Code no. (REF) NRFit®
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	10	4514211N-01
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	10	4510305N-01
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	10	45142111N-01
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	4514009N-01
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	4514017N-01
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<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	45120141N-01
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10	4513002N-01

COMBINED SPINAL AND EPIDURAL ANESTHESIA

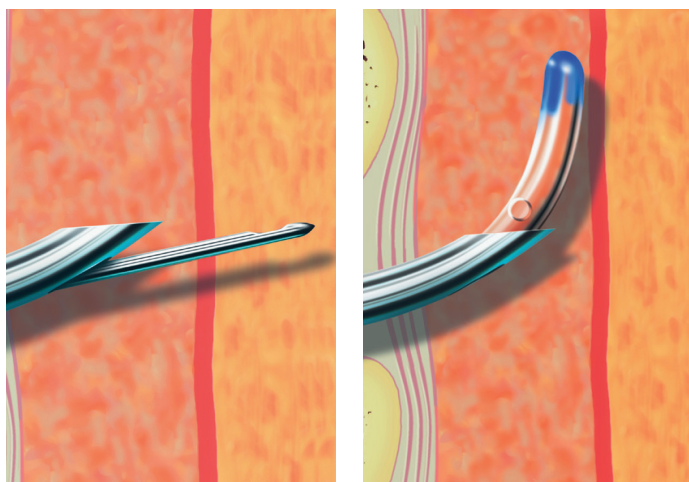




Combining the benefits of both techniques – sets for combined spinal and epidural anesthesia (CSE).



Products for Combined Spinal and Epidural Anesthesia

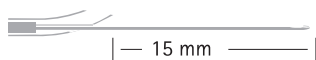


Special Tuohy Needle with a back-eye in the curved tip and a Spinal Needle with a plastic centering sleeve

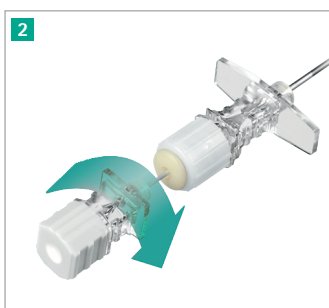
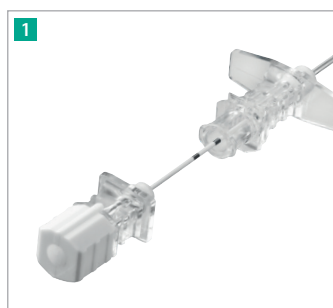
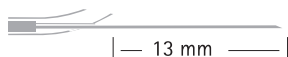
- Back-eye in tuohy needle for insertion of spinal needle
- Docking system to fixate the spinal needle
- Sleeved spinal needle for smooth exit through the back-eye

The ideal overlap of the spinal needle is by

Pencil Point Needle 15 mm



"Quincke" Needle 13 mm



Combined Spinal-Epidural Anesthesia (CSE):

THE BENEFITS

of Spinal and Epidural Anesthesia
in the Espocan®-Sets

Markings on the Spinal Needle 1

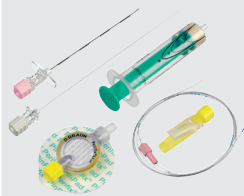

The markings on the spinal needle show, when the tip leaves the back-eye.

USER BENEFITS 2

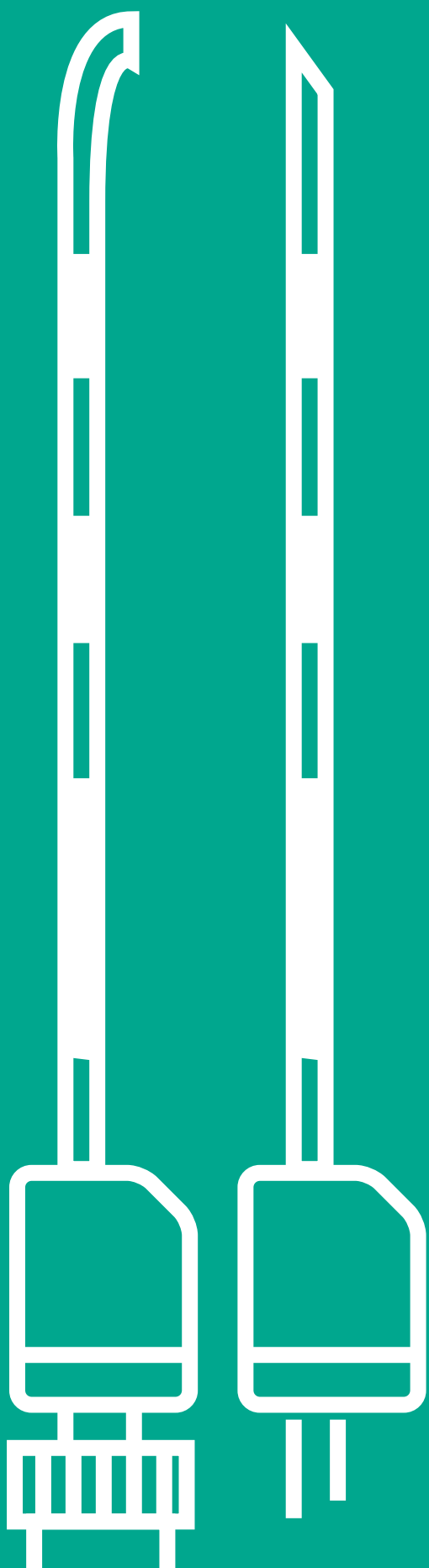
- The docking system allows rotation of the spinal needle even in the fixed position. Avoids the difficult and uncomfortable finger grip to steady fix the spinal needle in position
- The docking system ensures fixation of the spinal needle inside the tuohy needle after successful dura puncture and injection of the local anesthetic

Portfolio Overview

SETS FOR COMBINED SPINAL AND EPIDURAL ANESTHESIA

Espocan® and Perifix® Standard	Size (G)/ Length (inch)	ø/ Length (mm)	Units per box	Code no. (REF) Luer	Code no. (REF) NRFit®
	Pencil-Point Cannula: Pencan®				
	27 x 5"	0.42 x 127.5*	10	4556666	4556666N-01
	All sets contain <ul style="list-style-type: none"> ▪ Perifix® Standard catheter, 3 lateral eyes ▪ Perican® epidural cannula ø 1.30 mm, 18 G x 90 mm ▪ Perifix® LOR-syringe, Luer-Slip ▪ Perifix® epidural flat filter 0.20 µm ▪ Perifix® PinPad ▪ Perifix® catheter connector 				
Espocan® and Perifix® Standard with Docking System	Size (G)/ Length (inch)	ø/ Length (mm)	Units per box	Code no. (REF) Luer	Code no. (REF) NRFit®
	Pencil-Point Cannula: Pencan®				
	27 x 5 3/8"	0.42 x 138.5*	10	4556763	4556763N-01
	All sets contain <ul style="list-style-type: none"> ▪ Perifix® Soft-Tip catheter, 3 lateral eyes ▪ Docking system ▪ Perican® epidural cannula ø 1.30 mm, 18 G x 90 mm ▪ Perifix® LOR-syringe, Luer-Slip ▪ Perifix® epidural flat filter 0.20 µm ▪ Perifix® PinPad ▪ Perifix® catheter connector 				

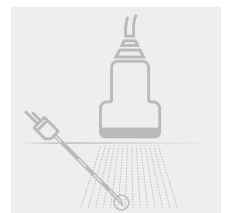
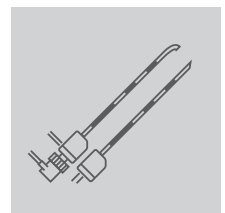
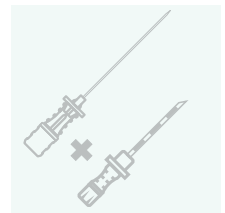
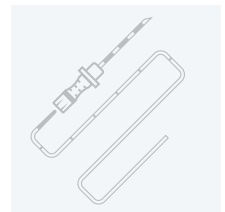
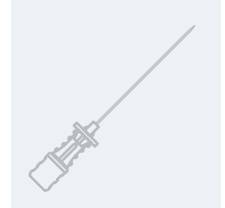
*for CSE needle length in NRFit®, please consult our NRFit® brochure



PERIPHERAL NERVE BLOCKS

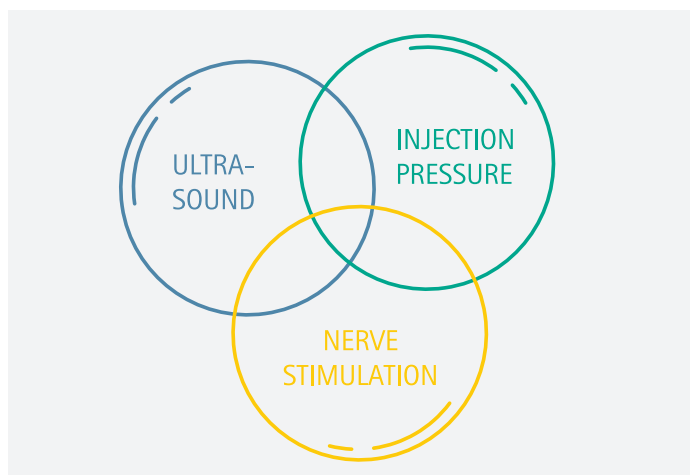


Whatever option you prefer – wide ranged product portfolio for stimulated and Ultrasound guided peripheral nerve blocks.



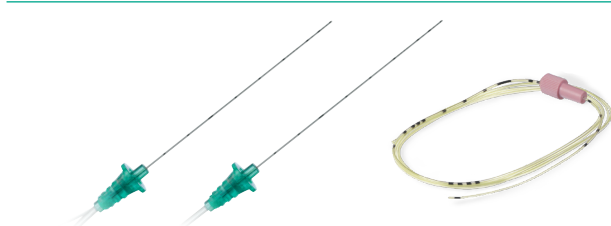
Peripheral Nerve Block Portfolio

Quality and functionality without compromise



When performing a peripheral nerve block, there is no such thing as being too safe. Peripheral nerve blocks can be performed using different techniques and approaches. Electrical nerve stimulation, Ultrasound guidance and injection pressure monitoring can be used alone or in combination.

B. Braun's broad peripheral nerve block portfolio offers solutions for Ultrasound-only, dual guidance monitoring, and stimulation procedures.



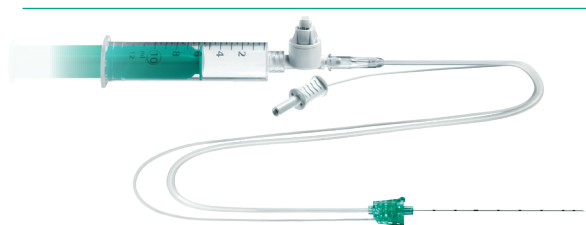
ULTRASOUND

B. Braun offers a large product range of echogenic needles and catheters. Ultraline 360 is the latest generation of Ultrasound needles that combines enhanced Ultrasound visibility with smooth gliding properties and a good puncture quality.¹¹



NERVE STIMULATION

For the electrical nerve stimulation B. Braun provides a wide range of stimulating needle and catheter systems that address the users' needs. The well established nerve stimulator Stimuplex® HNS 12 completes the offer.



INJECTION PRESSURE MONITORING

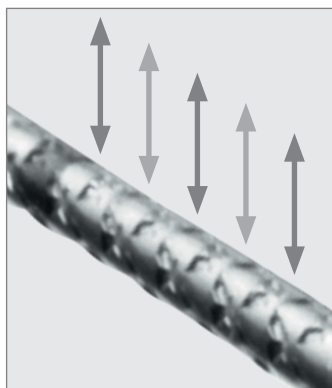
The disposable BSmart™ pressure monitor device objectively indicates the opening injection pressure in real time and allows for a more informed decision on how to proceed with an injection regardless of who performs the block. Using this technique can prevent injection into poorly compliant tissue (e.g. nerve fascicles).

Ultraline 360

Visibility without compromise – the next generations of Echogenic Nerve Block Needles



Circular (360°)
X-pattern-design

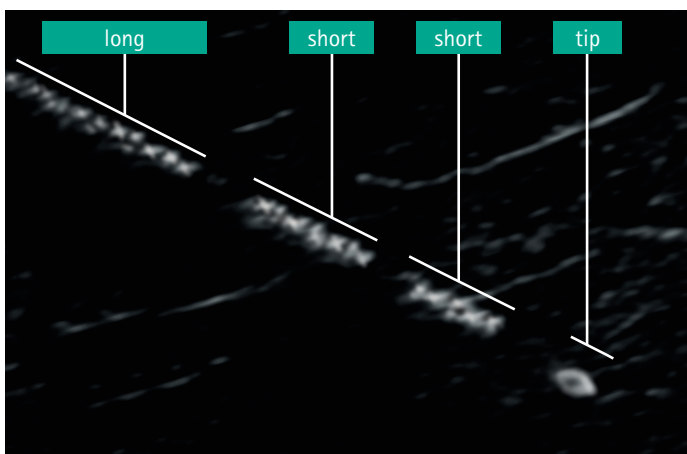


Reflection of the
Ultrasound waves

B. BRAUN ULTRASOUND NEEDLES – ULTRALINE 360:

The Ultraline 360 is B. Braun's latest generation of echogenic nerve block needles, featuring B. Braun's new echogenic 360° X-pattern. The 'X' is a unique shape, which when combined with a clear coating, is intended to reflect more Ultrasound waves back to the probe than previous designs.¹¹

The X-pattern is applied as a segmented safety-code (long-short-short-tip) and facilitates the needle tip identification. The Ultraline 360 portfolio combines increased Ultrasound visibility with excellent tactile feedback and puncture characteristics.



NAVIGATION

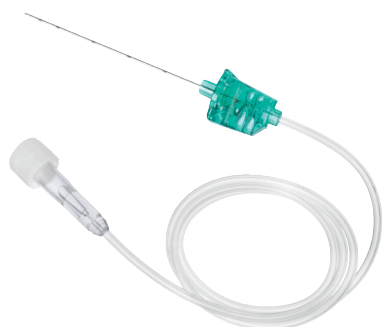
For an easy identification of the needle tip, the X-pattern is strategically applied on the first 20 mm of the needle shaft to create the segmented code "long-short-short-tip". This enables distinction between the needle tip and the upper needle shaft.¹¹

USER BENEFITS

- **Navigation:** Safety code for identification of the needle and needle tip position
- **Visibility:** 360° X-pattern and clear coating result in better Ultrasound visualization and tip identification compared to previous designs
- **Tactile Feedback:** designed for consistent puncture – same 30° back-cut bevel as previous Stimuplex® Ultra and Ultraplex® needles

Products for Peripheral Nerve Blocks











Single Shot Needles



Stimuplex® and Ultraplex® single shot needles offer precision and ergonomics and are designed for high success rates.

USER BENEFITS

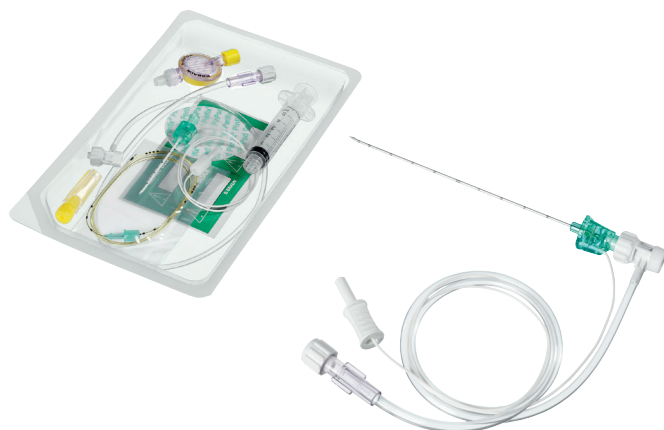
- Excellent puncture and gliding characteristics (Stimuplex® D)
- Broad portfolio of needle lengths from 35 to 150 mm and G 25 to G 20
- Ergonomic needle hub design for enhanced tactile feedback

Cannula	Bevel		Insulation		Echogenic properties	Stimulating capabilities
	 15°	 30°	 Full Tip	 PinPoint		
Stimuplex® A 		✓	✓			✓
Stimuplex® D 	✓	✓		✓		✓
Stimuplex® Ultra 360® 		✓	✓		✓	✓
Ultraplex® 360 		✓			✓	



Products for Peripheral Nerve Blocks

Sets for Continuous Peripheral Nerve Blocks



Contiplex® Continuous Nerve Block Sets

Continuous peripheral nerve blocks provide pain relief during and after surgical procedures, for improved patient recovery.¹²

USER BENEFITS

- Wide range of catheter sets
- Harmonized set components
- Good Ultrasound visibility of Perifix® ONE catheter

Set		Bevel	Echogenic properties	Catheter
		15° 20° 30° Tuohy	Standard ONE	
Catheter through the needle technique				
Contiplex® S Ultra 360®		✓	✓	✓
Contiplex® Tuohy Ultra 360®			✓	✓
Catheter over the needle				
Contiplex® C		✓	✓	✓

Products for Peripheral Nerve Blocks

Nerve Stimulation with the Stimuplex® HNS 12



1 Stimuplex® HNS 12 with SENSE



2 Stimuplex® Pen for cutaneous nerve mapping

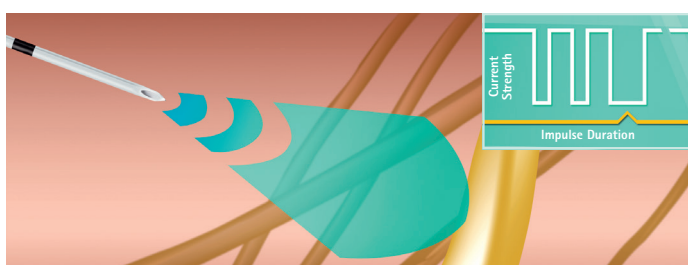
B. Braun Nerve Stimulator – Stimuplex® HNS 12 with SENSE

What is SENSE?

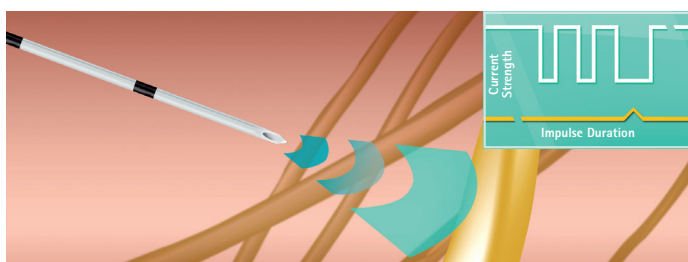
In practice, marginal needle movements often lead to losing the muscle twitch. The SENSE technology (Sequential electrical Nerve Stimulation) is a sequence of two fixed impulse durations of 0.1 ms along with a third longer impulse duration.¹³ Most traditional nerve stimulators emit two very short pulses every second. That's because short pulses improve accuracy or specificity when closer to the nerve. The downside is that sensitivity, or the availability to elicit visual feedback at a distance from the nerve, is lost. SENSE technology increases both sensitivity and specificity by adding a third, longer pulse. This results in eliciting a motor response even when the needle is far from or not aimed directly at the nerve and requires less adjustment to the amperage control while remaining the visual feedback.

USER BENEFITS

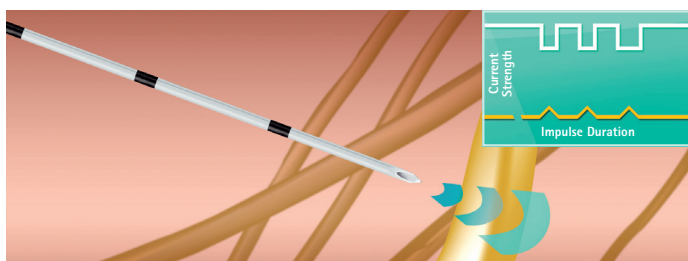
- Stimulation with SENSE-technology designed for more efficient nerve stimulation¹³
- Menus designed for easy control of sound and other settings
- Acoustic signals inform the user of any relevant deviations



As the needle is advanced, SENSE generates two short and one long pulse. 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 towards 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 0.5 mA three muscle twitches are visible as all three impulses stimulate the nerve.

Products for Peripheral Nerve Blocks

Injection Pressure Monitoring with BSmart™






Injection Pressure Monitoring

Accidental injection of local anesthetic into fascicles of peripheral nerves can result in permanent nerve injury.¹ Research has shown that high opening injection pressure (> 15 psi) indicates needle-nerve-contact or intrafascicular injection.^{14, 15, 16, 17, 18}

USER BENEFITS

- Objectively measures and displays injection pressure
- Color coding visualizes the pressure information
- Allows consistent monitoring of resistance to injection regardless of who performs the actual injection¹⁹
- Allows for standardized and objective documentation of injection pressure information during nerve block procedures



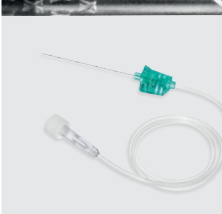
   The pressure information is conveniently displayed by the colour-coded pressure ranges on the BSmart™ piston.

BSmart™ Injection Pressure Monitor


The BSmart™ Injection Pressure Monitor is an easy-to-use inline injection pressure monitoring device providing clinicians with objective pressure information. This happens through a coloured piston, which climbs into the gauge depending on the pressure. BSmart™ Injection Pressure Monitor does not interfere with the tactile feedback of the syringe which has been traditionally used to assess the resistance of injection during nerve block procedures.


Portfolio Overview

SINGLE-SHOT BLOCK NEEDLES

Stimuplex® A	Needle ø (G) and Length (inch)	Needle ø and Length (mm)	Units per box	Code no. (REF) Luer	Code no. (REF) Luer
	Needles with 30° bevel				
	24 x 1"	0.55 x 25 mm	25		4894251
	22 x 1"	0.70 x 25 mm			4894539
	22 x 1 1/8"	0.70 x 35 mm			4894367
	22 x 2"	0.70 x 50 mm			4894502
	21 x 2"	0.80 x 50 mm			4894375
	21 x 4"	0.80 x 100 mm			4894260
	20 x 6"	0.90 x 150 mm			4894278
Stimuplex® D	Needle ø (G) and Length (inch)	Needle ø and Length (mm)	Units per box	Code no. (REF) Luer	Code no. (REF) NRFit®
	Insulated Needles with 15° Bevel				
	25 x 1 1/3"	0.50 x 35 mm	25	4892153	4892153NR
	25 x 2 1/8"	0.50 x 55 mm		4892155	4892155NR
	23 x 1 1/2"	0.60 x 40 mm		4892134	4892134NR
	23 x 2 3/4"	0.60 x 70 mm		4892137	4892137NR
Stimuplex® Ultra 360®	Needle ø (G) and Length (inch)	Needle ø and Length (mm)	Units per box	Code no. (REF) Luer	Code no. (REF) NRFit®
	Insulated Echogenic Needles with 30° Bevel				
	22 x 1 3/8"	0.70 x 35 mm	25	4892503-01	4892503NR-01
	22 x 2"	0.70 x 50 mm		4892505-01	4892505NR-01
	22 x 3 1/8"	0.70 x 80 mm		4892508-01	4892508NR-01
	20 x 4"	0.90 x 100 mm		4892510-01	4892510NR-01
	20 x 6"	0.90 x 150 mm		4892515-01	4892515NR-01
Ultraplex® 360	Needle ø (G) and Length (inch)	Needle ø and Length (mm)	Units per box	Code no. (REF) Luer	Code no. (REF) NRFit®
	Non-Insulated Echogenic Needles with 30° Bevel				
	22 x 1 3/8"	0.70 x 35 mm	25	4892603-01	4892603NR-01
	22 x 2"	0.70 x 50 mm		4892605-01	4892605NR-01
	22 x 3 1/8"	0.70 x 80 mm		4892608-01	4892608NR-01
	20 x 4"	0.90 x 100 mm		4892610-01	4892610NR-01
	20 x 6"	0.90 x 150 mm		4892615-01	4892615NR-01

ACCESSORIES





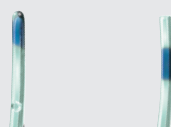
BSmart™	Description	Units per box	Code no. (REF)
	BSmart™ Injection Pressure Monitor	25	4894000-01






Nerve Stimulation	Description	Units per box	Code no. (REF)
	Stimuplex® HNS 12 Nerve Stimulator for Stimuplex®, Ultraplex® and Contiplex® needles	1	4892098

Nerve Stimulator Accessories and Spare Parts		Units per box	Code no. (REF)
Stimuplex® Pen for cutaneous nerve mapping		1	4892099
Electrode cable for Stimuplex® HNS 11/12			4892070
Battery cover for Stimuplex® HNS 12			4892094
Carrying Case for Stimuplex® HNS 12			4892095
Test resistor for Stimuplex® HNS 12			4892096
Knob for special handling			4892283

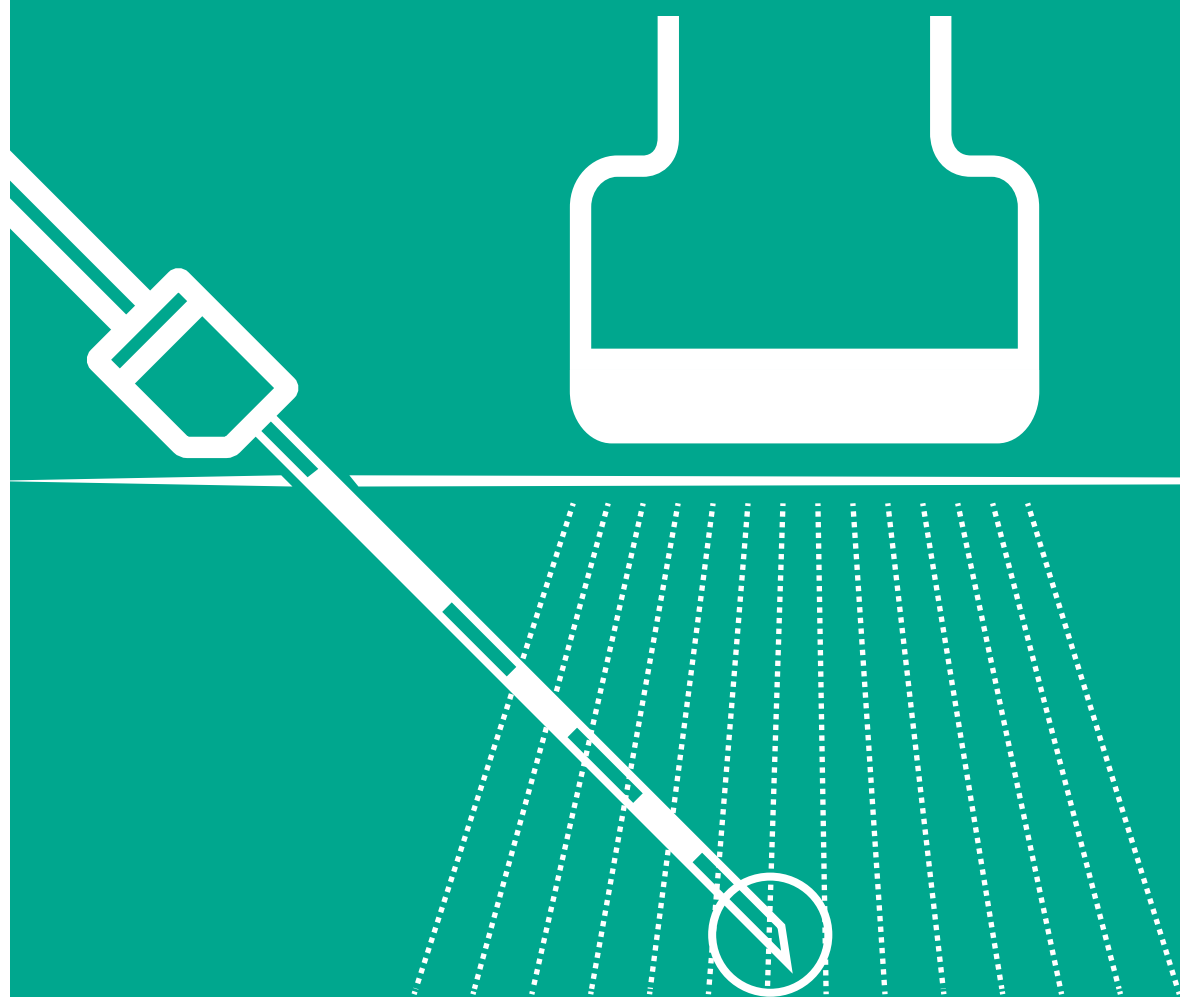
Portfolio Overview

SETS FOR CONTINUOUS NERVE BLOCKS

							
	Contiplex® C catheter-over-the-needle system	Contiplex® S Contiplex® S Ultra 360®	Contiplex® Tuohy Contiplex® Tuohy Ultra 360®	Contiplex® D	Perifix® Standard Catheter		
	25 G	18 G	18 G	18 G, 20 G			
Set Specifications	Bevel (°)		Needle			Perifix® Standard	
			Size (G)	Size Ø (mm)	Length (mm)	3 lateral openings (closed tip) (mm)	central opening (open tip) (mm)
	with NRFit®	with NRFit®	with NRFit®	with NRFit®			
Contiplex® C Sets							
Contiplex® C		15	25	0.53	190	-	-
Contiplex® C		30	25	0.53	190	-	-
Contiplex® D Sets							
Contiplex® D		15	18	1.30	110	-	1000
Contiplex® D		15	20	1.10	33	-	400
Contiplex® D		15	20	1.10	55	-	400
Contiplex® D		15	18	1.30	55	-	400
Contiplex® D		30	18	1.30	55	-	400
Contiplex® S Ultra 360® Sets							
Contiplex® S Ultra 360®		20	18	1.30	50	-	-
Contiplex® S Ultra 360®		20	18	1.30	100	-	-
Contiplex® S Ultra 360®		20	18	1.30	150	-	-
Contiplex® Tuohy Ultra 360® Sets							
Contiplex® Tuohy Ultra 360®		Tuohy bevel	18	1.30	40	-	-
Contiplex® Tuohy Ultra 360®		Tuohy bevel	18	1.30	50	-	-
Contiplex® Tuohy Ultra 360®		Tuohy bevel	18	1.30	100	-	-
Contiplex® Tuohy Ultra 360®		Tuohy bevel	18	1.30	150	-	-

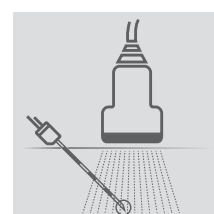
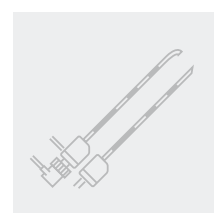
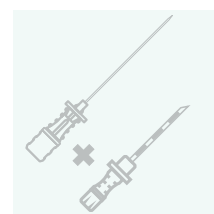
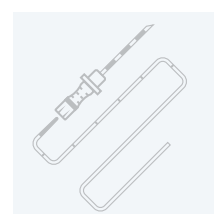
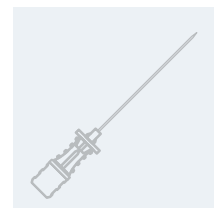
							
Contiplex® ONE Catheter (6 lateral openings, closed tip, open tip for Contiplex® C)	Perifix® Catheter Connector 19 G or 20/24 G	Perifix® PinPad filter fixation	Perifix® Filter 0.20 µm, Pressure resistant up to 7 bar	Omnifix® syringe 5 ml			
Contiplex® ONE (mm)	Perifix® Catheter Connector	Perifix® PinPad	Perifix® Filter with NRFit®	Omnifix® with NRFit®	Units per box	Code no. (REF) Luer	Code no. (REF) NRFit®
187	■	■	■	-	5	4898115-01	4898115NR
187	■	■	■	-		4898130-01	4898130NR
-	■	■	■	■	10	4898311-01	4898311NR
-	■	■	■	■		4898323-01	4898323NR
-	■	■	■	■		4898325-01	4898325NR
-	■	■	■	■		4898305-01	4898305NR
-	■	■	■	■		4898335-01	4898335NR
400	■	■	■	■		4898650-01	4898650NR-27
1000	■	■	■	■		4898610-01	4898610NR-27
500	■	■	■	■		4898615-01	4898615NR-27
400	■	■	■	■		4898704-01	4898704NR-01
400	■	■	■	■		4898705-01	4898705NR-01
1000	■	■	■	■		4898710-01	4898710NR-01
1000	■	■	■	■		4898715-01	4898715NR-01

ULTRASOUND GUIDANCE





Reimagine Regional Anesthesia
with B. Braun's innovative portfolio
for Ultrasound guided therapies.



ULTRASOUND
GUIDANCE

Xperius® Ultrasound System

Responsive | Advanced | Simple



Xperius® is a new Ultrasound system jointly developed by B. Braun and Philips which has been specifically designed to support the current and future needs in regional anesthesia and vascular access at the point of care.

RESPONSIVE

The system offers a high degree of mobility and flexibility combined with an ergonomic design to improve daily practice. A fully articulating arm allows easy adjustments of the Ultrasound monitor position and the angle of the screen for ergonomic use and better line of sight. Besides the cart based system, a dedicated ultra portable tablet device allows quick bedside scanning or interventions in your facility, on-the-go and at satellite locations.

ADVANCED

Xperius® provides high quality imaging of nerves and tissue structures for confident diagnoses and precise needle guidance. The predetermined settings (presets) are designed so you can spend less time adjusting controls and more time focusing on your patients.

SIMPLE

Xperius® – Allows you to quickly and comfortably conduct exams. Xperius® comes with intuitive touch and gesture controls that you already know from your smart devices – to keep your focus on your work and not on the controls. Its simple interface supports daily routines and provides specific presets for procedures in regional anesthesia and vascular access.

Designed around you to fit seamlessly into the anesthesiologists' care area

- ✓ Advanced ergonomics
- ✓ Convenient accessory bins
- ✓ High mobility & portability
- ✓ Designed by Philips & B. Braun

High performance technology delivers exceptional image quality

- ✓ High definition imaging
- ✓ Enhanced needle visualization
- ✓ New generation of probes

Intuitive and easy to use

- ✓ Improved workflow
- ✓ Intuitive user experience
- ✓ Touch screen & gesture control
- ✓ Dedicated regional anesthesia & vascular access presets

Intuitive Interface & Advanced Technology



Multiple presets - 4 specific ones for regional anesthesia / vascular access



Intuitive touchscreen



Start scanning in a few seconds



Built-in Wi-Fi for DICOM data transfer



Needle Vis Technology

Ready-to-go for Bedside Scanning



Long lasting battery up to 3 h of scanning



Lightweight and easy to handle

Articulating Arm



Flexible rotation in every direction



Height-adjustable

Core Ultrasound Technology



Transducer with USB connector

Convenient Storage

Everything needed for procedures is within reach



Onvision® Needle Tip Tracking

Accurate | Predictable | Empowering



Onvision® is an Ultrasound based Needle-Tip tracking technology for peripheral nerve blocks which works exclusively with the Xperius® Ultrasound system and the dedicated Stimuplex® Onvision® needle. In real-time, Onvision® accurately indicates where the needle tip is inside the body, both in and out of plane. It helps users align the needle with the probe in an intuitive and easy to use manner – to improve pain relief and the avoidance of unintended nerve puncture or collateral damage to surrounding tissue or vessel.

Onvision® is an Ultrasound based Technology for reliable Needle Guidance

The dedicated Stimuplex® Onvision® needle is embedded with a tip sensor, which allows accurate detection of the tip location and displays this information in real time on the live Ultrasound image. Needle-Tip tracking can be used in 2D Mode with the nerve 0-4 cm and the nerve 4-6 cm preset on the L12-4 transducer and nerve 6+ cm presets on the C5-2 transducer depending on the anatomical depth of the nerve.

ACCURATE

Know where you are in real-time^{20, 21}

- ✓ Tip visualization in both superficial and deeper blocks
- ✓ Ultrasound based detection and accuracy
- ✓ Can reduce complications during PNB placement
- ✓ Designed to prevent unintended overshooting

PREDICTABLE

Helping make first-time-right the new standard^{20, 21}

- ✓ Confidently perform local anesthetics injection
- ✓ Reduction in overall procedure time
- ✓ Fits in to current workflow (no workflow disruption)

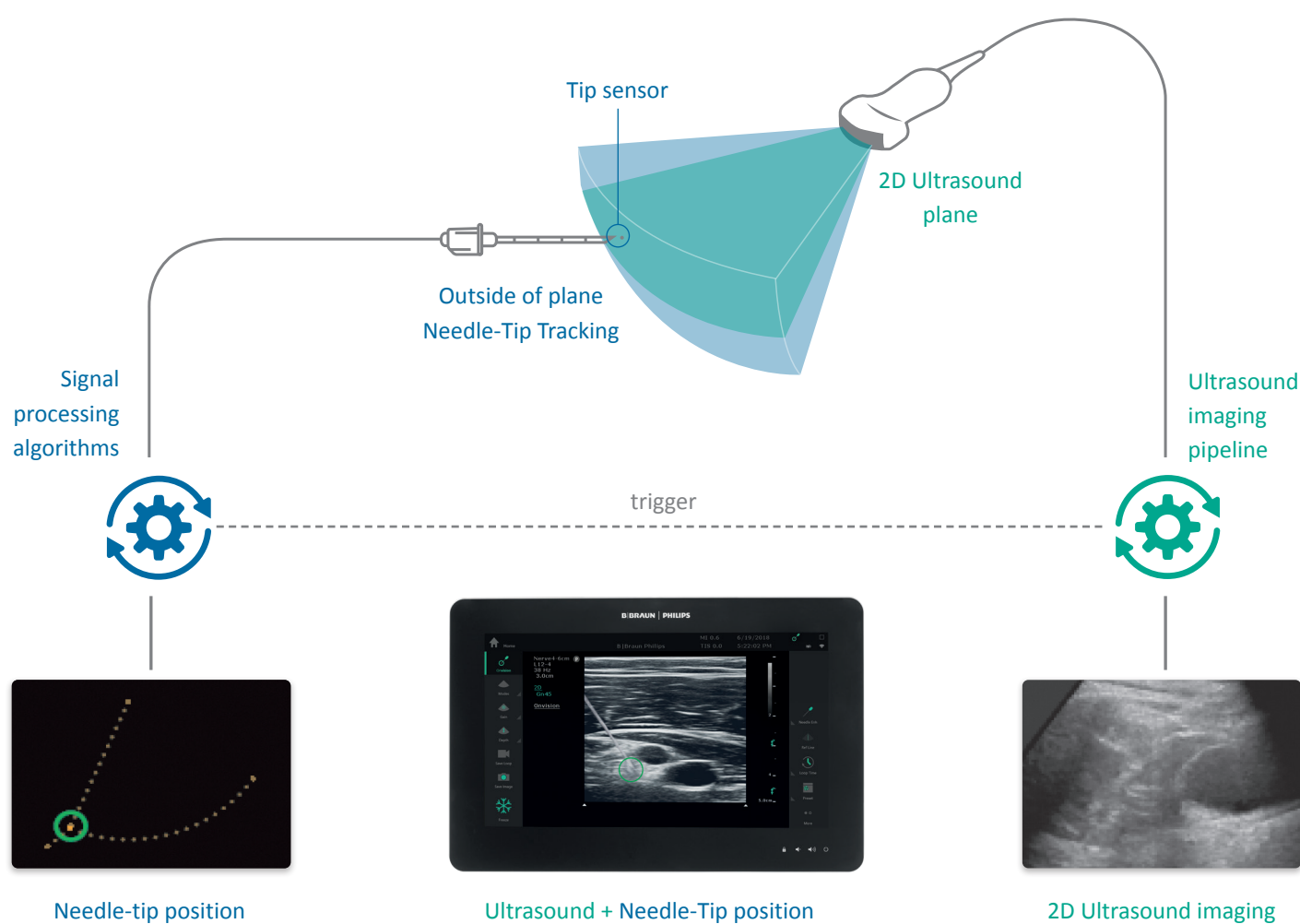
EMPOWERING

More anesthesiologists can carry out regional anesthesia²²

- ✓ Intuitive user experience
- ✓ Easy to adopt
- ✓ Can increase proficiency level

Needle Tip Navigation to the Point

With Onvision®, users experience a real time guidance which empowers them to quickly adopt and integrate PNB into their daily practice. Onvision® enables more physicians to be proficient in performing PNBs.²³



Ultrasound based Technology to improve Accuracy


- Onvision® works up to 12 cm
- Onvision® is shielded against electromagnetic interferences (EMI)
- Onvision® remains accurate even when the needle bends

Portfolio Overview


ULTRASOUND SYSTEM AND ONVISION® TECHNOLOGY

Xperius®	Description	Units per box	Code no. (REF)
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Xperius® Cart System with 1 transducer L12-4 and Onvision® Needle Tip Tracking Technology

 <p>with Onvision®</p>	<ul style="list-style-type: none"> Type of unit: Compact Cart based Point of Care Ultrasound System with Linear L12-4 and Onvision® Technology Dimensions: 132.5 cm x 56.0 cm x 66 cm (H/W/D) Weight: 36.0 kg Display: 39.6 cm (15.6 in) flat-panel touch-screen Imaging mode keys: 2D, Color Doppler, Color Power Angio (CPA), M-Mode 	1	NUSM621
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Xperius® Cart System with 1 transducer L12-4

	<ul style="list-style-type: none"> Type of unit: Compact Cart based Point of Care Ultrasound System with fully articulating arm and Linear L12-4 Dimensions: 132.5 cm x 56.0 cm x 66 cm (H/W/D) Weight: 34.0 kg Display: 39.6 cm (15.6 in) flat-panel touch-screen Imaging mode keys: 2D, Color Doppler, Color Power Angio (CPA), M-Mode 	1	NUSM623
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Xperius® Stand-alone Tablet with 1 transducer L12-4

	<ul style="list-style-type: none"> Type of units: Point of Care Tablet Ultrasound System with Kickstand and Linear 12-4 Dimensions: 28 cm x 42 cm x 5 cm (H/W/D) Weight: 3.6 kg 	1	NUSM626
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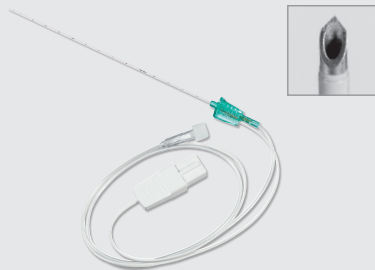
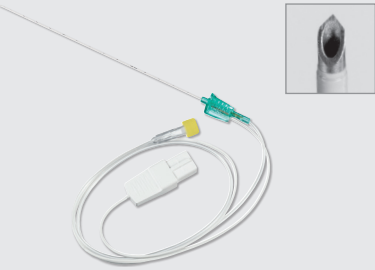
Peripherals

	<p>Printer Sony UP-D711MD</p> <ul style="list-style-type: none"> High-quality digital graphic printer Easy to connect within dedicated Xperius® printer slot Dimensions: 7 cm x 14 cm x 12.5 cm (H/W/D) Weight: 1 kg Monochrome, black/white, A7 paper size 	1	NUSM620
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COMPLEMENTARY PRODUCTS

Xperius® Upgrade Items	Description	Units per box	Code no. (REF)
Single Transducer Linear			
	<p>L12-4 broadband linear array transducer</p> <ul style="list-style-type: none">▪ 12 to 4 MHz extended operating frequency range▪ Aperture size: 34 mm▪ High resolution imaging for shallow applications▪ Center line marker▪ USB transducer with replaceable cable	1	FUS5716
Single Transducer Curved			
	<p>C5-2 broadband curved array transducer</p> <ul style="list-style-type: none">▪ 5 to 2 MHz extended operating frequency range▪ 50 mm radius of curvature▪ High resolution imaging for deeper applications▪ Center line marker▪ USB transducer with replaceable cable	1	FUS5712

ONVISION® SINGLE SHOT BLOCK NEEDLES

Stimuplex® Onvision®	Needle ø (G) and Length (inch)	Needle ø and Length (mm)	Units per box	Code no. (REF) Luer
Luer Version				
	Insulated Needles with 30° Bevel			
	22 x 2"	0.70 x 50 mm	10	4892705-01
	22 x 3 1/8"	0.70 x 80 mm		4892708-01
	20 x 4"	0.90 x 100 mm		4892710-01
	20 x 4 3/4"	0.90 x 120 mm		4892712-01
	20 x 6"	0.90 x 150 mm		4892715-01
Stimuplex® Onvision®	Needle ø (G) and Length (inch)	Needle ø and Length (mm)	Units per box	Code no. (REF) NRFit®
NRFit® Version				
	Insulated Needles with 30° Bevel			
	22 x 2"	0.70 x 50 mm	10	4892705NR-01
	22 x 3 1/8"	0.70 x 80 mm		4892708NR-01
	20 x 4"	0.90 x 100 mm		4892710NR-01
	20 x 4 3/4"	0.90 x 120 mm		4892712NR-01
	20 x 6"	0.90 x 150 mm		4892715NR-01

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Notes

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Date of last revision: 12.2020