B BRAUN
SHARING EXPERTISE

REGIONAL ANAESTHESIA
PRODUCT CATALOGUE

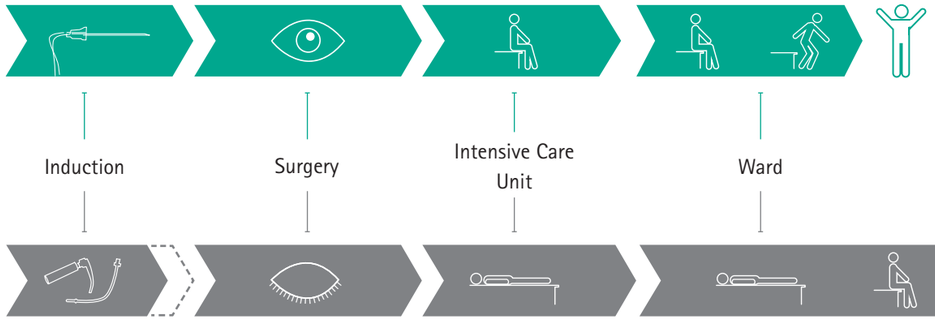
Optimise your processes

Thanks to Regional Anaesthesia

Regional anaesthesia is an essential part of pain therapy, as across several interventions, it offers clear advantages when compared to general anaesthesia.[1] For regional anaesthesia 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 anaesthesia and the numerous publications on the topic are both a testament to how regional anaesthesia can have a positive impact on both patient outcome and on efficiencies for the clinic.[2,3]

WITH REGIONAL ANAESTHESIA



WITHOUT REGIONAL ANAESTHESIA

COMPARING TWO POTENTIAL INTERVENTIONS WITH AND WITHOUT REGIONAL ANAESTHESIA:

Looking holistically across the patient pathway, the establishment of regional anaesthesia processes appears to be a favourable investment. When regional anaesthesia is used, patients see better outcomes, faster mobilisation and consequently earlier discharge.[4,5]

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Spinocan® | Pencan® | Spinal Introducer Needle

SPINAL ANAESTHESIA

EPIDURAL ANAESTHESIA

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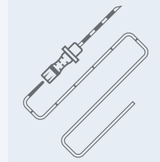
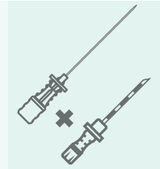
Perifix® Epidural Catheter | Accessories



EPIDURAL ANAESTHESIA

COMBINED SPINAL & EPIDURAL ANAESTHESIA

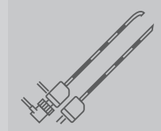
Espocan® Sets



COMBINED SPINAL AND EPIDURAL ANAESTHESIA

PERIPHERAL NERVE BLOCKS

Contiplex® C | Contiplex® S Ultra 360®| Contiplex® Tuohy Ultra 360®
Stimuplex® Ultra 360 | Ultraplex® 360 | Stimuplex® A



PERIPHERAL NERVE BLOCKS

ULTRASOUND GUIDANCE

Xperius® | Onvision®

ULTRASOUND GUIDANCE

Reducing Risks of Misconnections in Regional Anaesthesia with NRFit®

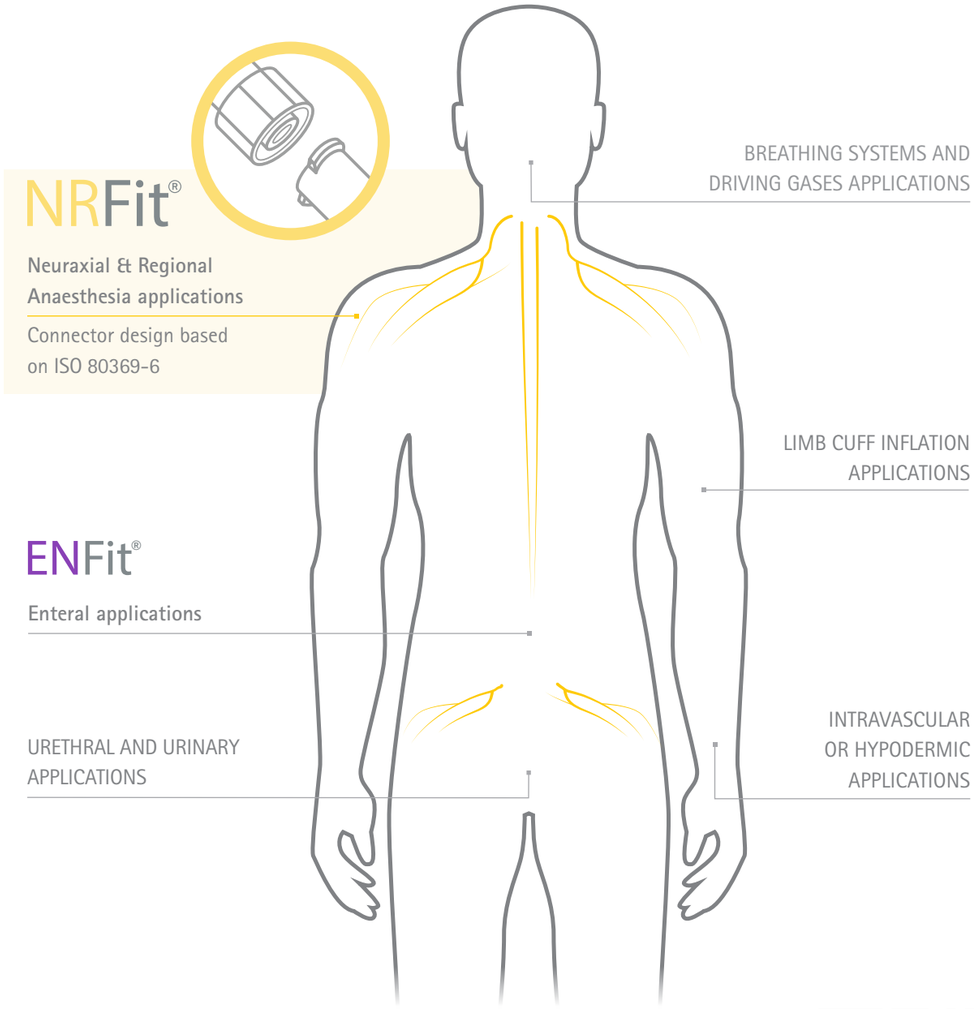
MEDICAL DEVICE CONNECTORS FOR NEURAXIAL & REGIONAL ANAESTHESIA APPLICATIONS ARE CHANGING TO MEET INTERNATIONAL DESIGN STANDARDS: ISO 80369-6. [6]

Regional Anaesthesia products with NRFit® connector

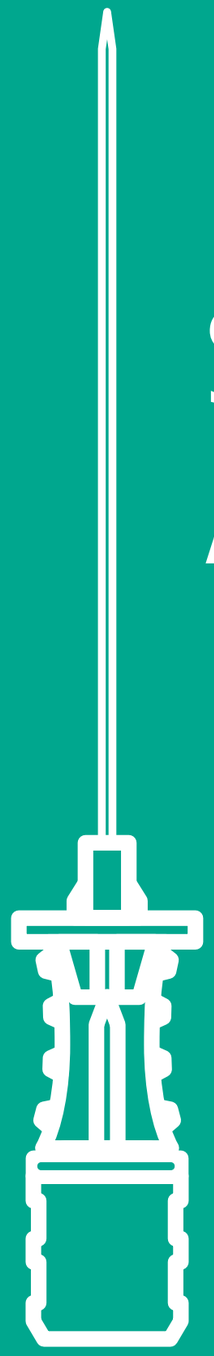
In line with the ISO Standard (International Organisation for Standardisation) for neuraxial and regional anaesthesia devices, B. Braun has developed a comprehensive portfolio with NRFit® connectors for the corresponding process steps.

Connecting what belongs together

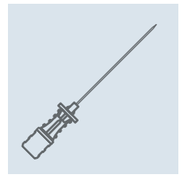
The ISO has identified several medical application areas for which specific ISO standards have been developed. These standards are part of the ISO 80369 series. Each standard will provide design and performance specifications for these connectors. [1]

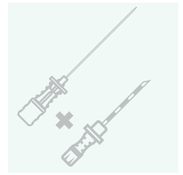


SPINAL ANAESTHESIA



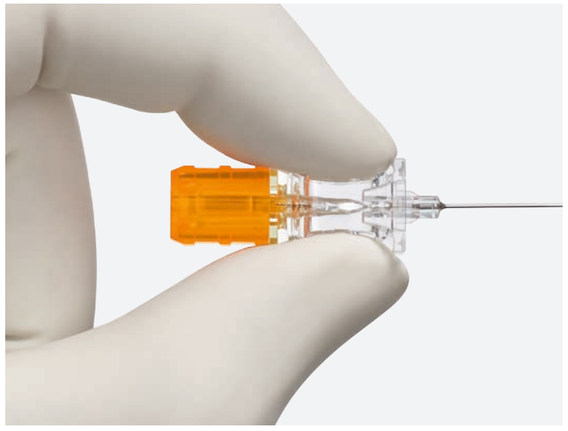
A comprehensive portfolio of needles in different bevel types for spinal anaesthesia.





Products for Spinal Anaesthesia

Quality and Practicality



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

Thanks to our years of

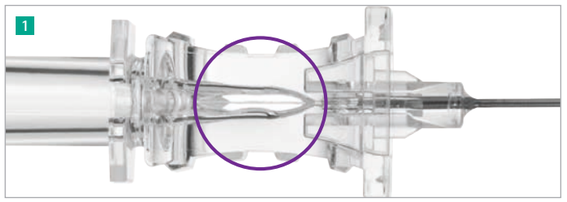
EXPERIENCE

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

Spinocan® and Pencan® have the features you need to meet today's

EXACTING

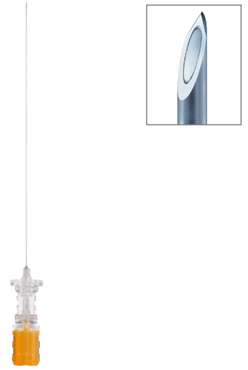
Pain Control demands.



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 force[7]
- Fitted stylet: to reduce the risk of tissue coring and potential epidermoid tumor development[8]
- Prism included in the spinal needle hub, supports identification of CSF flashback

Pencan® with Pencil Point Bevel

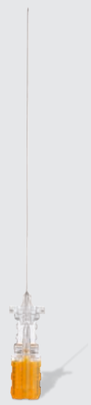
- Pencil point tip and opening design allows avoidance of incomplete blocks and helps reduce PDPH[8]
- Minimal intrathecal penetration depth[7]
- Identification of tissue structures due to detectable dura click[7,9]
- Prism included in the spinal needle hub, supports identification of CSF flashback

Spinal Introducer Needle

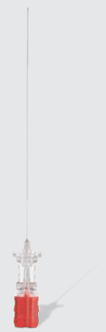
- Introducer needles providing needle guidance for the spinal needle during puncture[7]

Portfolio Overview

SPINAL NEEDLES - QUINCKE

Spinocan®	Colour code	Size (G)/ Length (inch)	ø/Length (mm)	Units per box	Code no. (REF) Luer	Code no. (REF) NRFit®
		27 x 3 ½"	0.4 x 88		-	4503902N-01
		26 x 3 ½"	0.45 x 88		4502906	4502906N-01
		25 x 3 ½"	0.55 x 88		4505905	4505905N-01
		22 x 1 ½"	0.70 x 40		-	4507401N-01
		22 x 3"	0.70 x 75	25	-	4507754N-01
		22 x 3 ½"	0.70 x 88		4507908	4507908N-01
		20 x 3 ½"	0.90 x 88		4509900	4509900N-01
		19 x 3 ½"	1.10 x 88		4501195	4501195N-01
		18 x 3 ½"	1.30 x 88		-	4501390N-01
Long Length						
		29 x 3 ½"	0.33 x 88		-	4501900N-01
		29 x 4 ¾"	0.33 x 120		-	4501918N-01
		27 x 4 ¾"	0.4 x 120		-	4502140N-01
		25 x 4 ¾"	0.55 x 120	25	4505913	4505913N-01
		22 x 4 ¾"	0.70 x 120		4506090	4506090N-01
		22 x 6"	0.90 x 150		-	4506095N-01

SPINAL NEEDLES - PENCIL POINT

Pencan®	Colour code	Size (G)/ Length (inch)	ø/Length (mm)	Units per box	Code no. (REF) Luer	Code no. (REF) NRFit®
		27 x 3 ½"	0.4 x 88	25	4502027	4502027N-01
						4502051N-01*
		25 x 3 ½"	0.5 x 88		4502019	4502019N-01
						4502043N-01*
		22 x 3 ½"	0.7 x 88		4502035	4502035N-01
Long Length						
		27 x 4"	0.4 x 103	25	4502124*	4502124N-01*
		27 x 4 ¾"	0.4 x 120		-	4502132N-01
		25 x 4"	0.5 x 103		4502116*	4502116N-01*
		25 x 6.1"	0.5 x 156		333877	333877N-01
Pencan® Paed						
		27 x 2"	0.4 x 50	25	-	4502175N-01
		25 x 1"	0.5 x 25		4502167	4502167N-01
		25 x 2"	0.5 x 50		4502159	4502159N-01

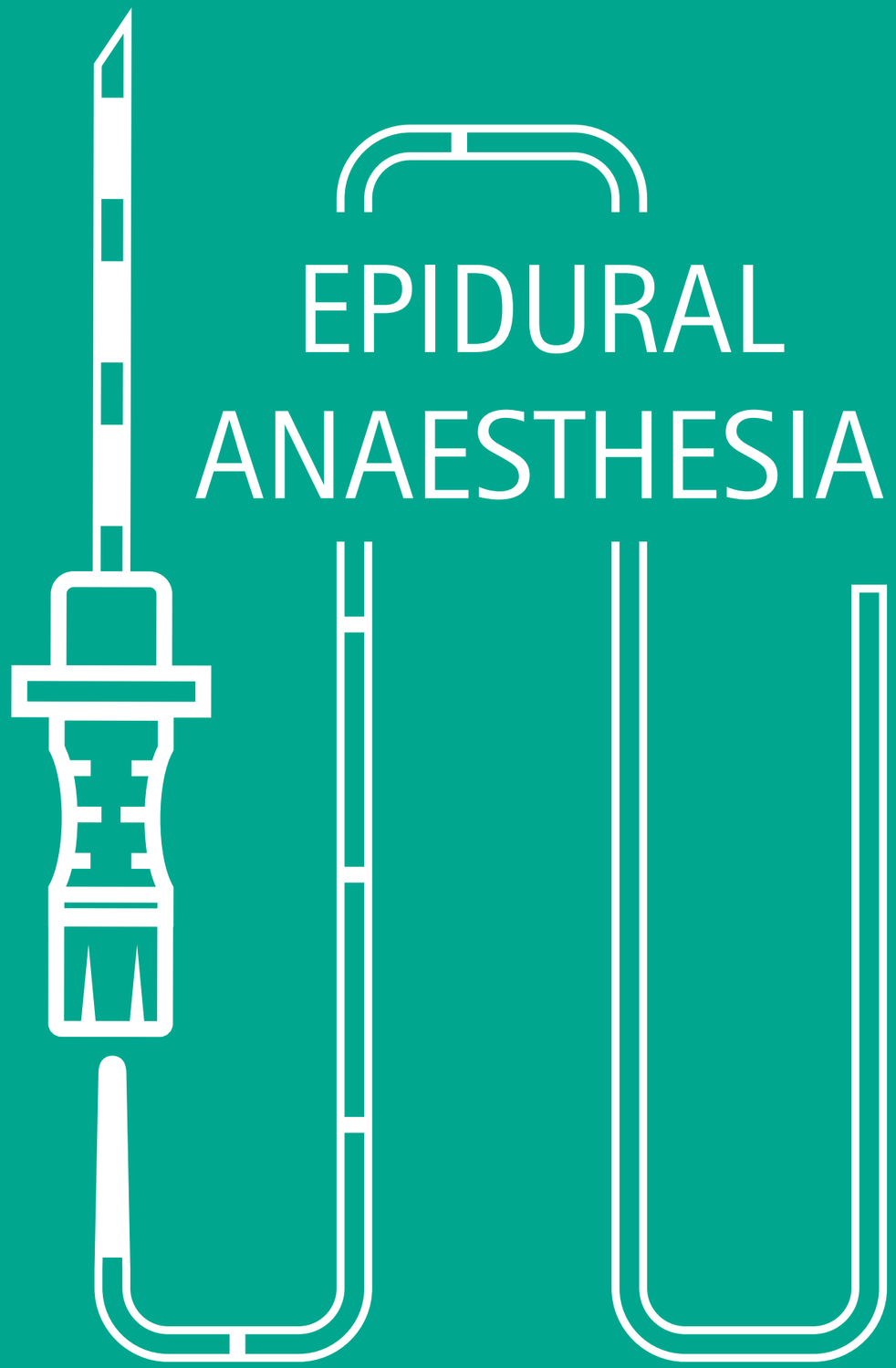
*with Spinal Introducer Needle (Luer)

INTRODUCER

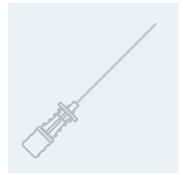
Spinal Introducer Needles (for Spinocan® and Pencan®)	Colour code	Size (G)/ Length (inch)	ø/Length (mm)	Units per box	Code no. (REF) OHD Luer	Code no. (REF) NRFit®
	For Spinal Needles 26 G and 25 G					
		20 x $1^{3}/_{8}$"	0.9 x 35	25	4505000*	4505000*

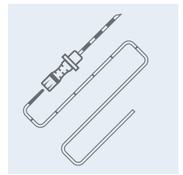
*Introducer in Luer

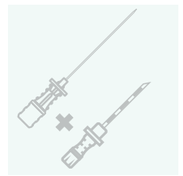
EPIDURAL ANAESTHESIA



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

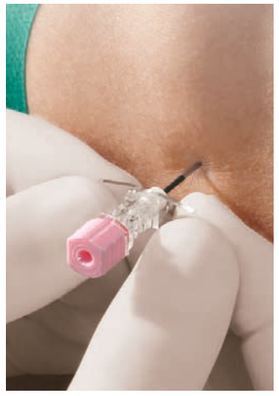






Products for Epidural Anaesthesia

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, 22 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 control during needle advancement
- Fitted stylet: to reduce the risk of tissue coring and potential epidermoid tumor development[11]

Products for Epidural Anaesthesia

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

Perifix® Soft-Tip Catheter

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

Perifix® ONE

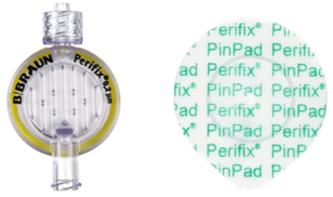
- Epidural catheter with a relatively stiff but flexible shaft and a soft, atraumatic tip
- Length 1000 mm
- Six micro-holes enhance the spread of anaesthetic drug
- Three radiopaque enclosed yellow barium sulphate stripes for identification on x-ray images
- Does not contain latex, DEHP or PVC
- MRI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

Products for Epidural Anaesthesia

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® Filter with PinPad

- Filter fixation on patient in combination with self-adhesive PinPad
- Filter reduces the risk of bacterial infections[11]
- Pressure resistant up to 7 bar

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® 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 Anaesthesia

Epidural Anaesthesia 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[8]

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 paediatric 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

Pericán®	Colour code	Size (G) / Length (inch)	ø / Length (mm)	Units per box	Code no. (REF) Luer	Code no. (REF) NRFit®
		18 x 3¼"	1.3 x 80	25	4512383	4512383N-01
		16 x 3¼"	1.7 x 80		4512782	4512782N-01
	Long Length					
		18 x 4¾"	1.3 x 120	25	4512453	4512453N-01
		18 x 6"	1.3 x 150		4512200	4512200N-01
		16 x 4¾"	1.7 x 120		-	4512785N-01
		16 x 6"	1.7 x 150		-	4512784N-01

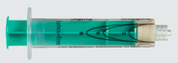
Pericán® Paed	Colour code	Size (G) / Length (inch)	ø / Length (mm)	Units per box	Code no. (REF) Luer	Code no. (REF) NRFit®
		22 x 2"	0.73 x 50	25	-	4502078N-01
		20 x 2"	0.9 x 50		-	4502094N-01

EPIDURAL CATHETERS

Perifix® catheter	Catheter ø outer/inner/ Length (mm) (G)	Suitable for Pericán® Size (G)	Units per box	Code no. (REF) Luer	Code no. (REF) NRFit®
	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

EPIDURAL 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®
	0.2	25	4515501	4515501N-01

Perifix® PinPad	Description	Units per box	Code no. (REF)
	Perifix® PinPad Filter Fixation	25	4515510

Portfolio Overview

SETS FOR EPIDURAL ANAESTHESIA (LUER)

Legend
- 20 G x 2", ø 0.9 x 50 mm
- 18 G x 3 ¼", ø 1.3 x 80 mm,
- 18 G x 2", ø 1.3 x 50 mm (Paed Set)
- 16 G x 3 ¼ ", ø 1.7 x 80 mm

Perican® Tuohy needle

50mm | 80mm

Perifix® ONE epidural catheter, 6 lateral eyes

24G | 20G

Perifix® Soft Tip epidural catheter, 3 lateral eyes

20G | 19G

Perifix® Loss of Resistance syringe

Omnifix® three part syringe, 20 ml, Lock, Sterifix® filter needle

Omnifix® three part syringe, 3 ml, Lock, Sterifix® filter needle

Perifix® Filter 0.2 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 Luer hypodermic needles*

*** Sterican® needles**
- 25 G, 16 mm, ø 0.5 mm
- 21 G, 40 mm, ø 0.8 mm
- 18 G, 40 mm, ø 1.2 mm

Caution: Hypodermic needles (for skin infiltration) stay Luer

Set Versions	Pericar® Tuohy Needle		Perifix® ONE with NRFit®		Perifix® Soft Tip		Perifix® LOR	Omnifix® and Sterifix®	Omnifix® and Sterifix®	Perifix® Filter	Perifix® catheter connector	Perifix® PinPad	Omnifix® and hypodermic needles with Luer	Units per box	Code no. (REF)
Complete Sets															
Perifix® Soft Tip 901 18G		■			■		■	■		■	■	■	■		4510305
Perifix® ONE 421 18G		■		■			■	■		■	■	■	■	10	4514211C
Perifix® Soft Tip 431 16G		□			■		■	■		■	■	■	■		4514319
Filter Sets															
Perifix® 400 Filter Set 18G		■				■	■			■	■				4514009
Perifix® 402 Filter Set 16G		□				■	■			■	■			20	4514025
Pediatric Sets															
Perifix® ONE Paed 18G	■			■			■			■	■	■			4512006C
Perifix® ONE Paed 20G	■		■				■			■	■	■		10	45120141C

SETS FOR EPIDURAL ANAESTHESIA (NRFIT®)

Legend
- 20 G x 2", ø 0.9 x 50 mm
- 18 G x 3 ¼", ø 1.3 x 80 mm,
- 18 G x 2", ø 1.3 x 50 mm (Paed Set)
- 16 G x 3 ¼ ", ø 1.7 x 80 mm

Pericar® Tuohy needle

50mm | 80mm

Perifix® ONE epidural catheter, 6 lateral eyes

24G | 20G

Perifix® Soft Tip epidural catheter, 3 lateral eyes

20G | 19G

Perifix® Loss of Resistance syringe

Omnifix® three part syringe, 20 ml, Lock, Sterifix® filter needle

Omnifix® three part syringe, 3 ml, Lock, Sterifix® filter needle

Perifix® Filter 0.2 µm, pressure resistant up to 7 bar

Perifix® catheter connector 19 G or 20/24 G

Perifix® PinPad filter fixation

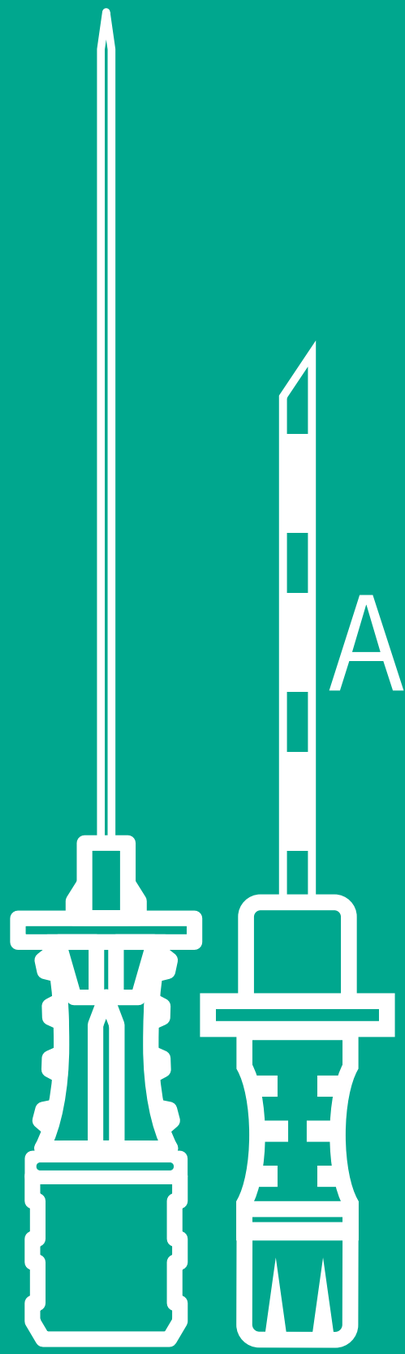
Omnifix® three part syringe, 3ml, Luer Lock, 3 Luer hypodermic needles*

*** Sterican® needles**
- 25 G, 16 mm, ø 0.5 mm
- 21 G, 40 mm, ø 0.8 mm
- 18 G, 40 mm, ø 1.2 mm

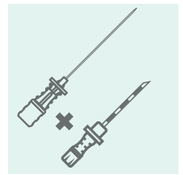
Caution: Hypodermic needles (for skin infiltration) stay Luer

Set Versions	Pericar® with NRFit®		Perifix® ONE with NRFit®		Perifix® Soft Tip with NRFit®		Perifix® LOR with NRFit®	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®
Complete Sets															
Perifix® Soft Tip 901 18G NRFit		■			■		■	■		■	■	■	■	10	4510305N-01
Perifix® ONE 421 18G NRFit		■		■			■	■		■	■	■	■		45142111N-01
Filter Sets															
Perifix® 402 Filter Set 16G NRFit		□				■	■			■	■			10	45120061N-01
Pediatric Sets															
Perifix® ONE Paed 18G NRFit	■			■			■			■	■	■		10	45120061N-01
Perifix® ONE Paed 20G NRFit	■		■				■			■	■	■			45120141N-01

COMBINED SPINAL AND EPIDURAL ANAESTHESIA



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



Products for Combined Spinal and Epidural Anaesthesia

SETS FOR COMBINED SPINAL AND EPIDURAL ANAESTHESIA (LUER)

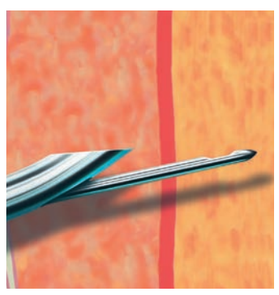
Luer Set Version	Perican® epidural cannula ø 1.3 mm, 18G x 90 mm	Perifix® Soft-Tip catheter 3 lateral eyes	Perifix® LOR syringe with Luer Slip	Perifix® flat filter 0.2 µm	Perifix® catheter connector	Perifix® PinPad	Units per box	Code Number
Espocan® with Docking Station & Pencan 27G x 141mm with Luer	■	■	■	■	■	■	10	4556763

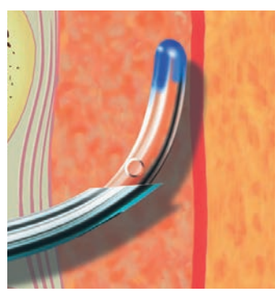
SETS FOR COMBINED SPINAL AND EPIDURAL ANAESTHESIA (NRFIT)

NRFit Set Version	Perican® epidural cannula ø 1.3 mm, 18G x 90 mm with NRFit	Perifix® Soft-Tip catheter 3 lateral eyes, with NRFit	Perifix® LOR syringe with NRFit	Perifix® flat filter 0.2 µm with NRFit	Perifix® catheter connector with NRFit	Perifix® PinPad	Units per box	Code Number
Espocan® with Docking Station & Pencan 27G x 141mm with NRFit	■	■	■	■	■	■	10	4556763N-01

Combined Spinal-Epidural Anaesthesia (CSE):

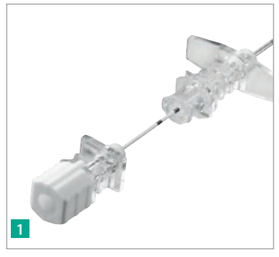
THE BENEFITS of Spinal and Epidural Anaesthesia in the Espocan® Sets

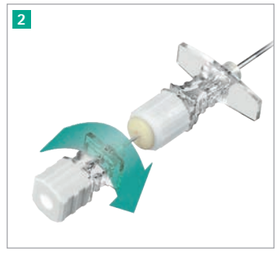




Special Pencan Tuohy Epidural needle with additional back eye in the Tuohy curve plus a Pencan Spinal needle with sleeve to centre the needle inside the epidural Tuohy needle.

- Tip of the spinal needle exits straight through the back eye of the Tuohy needle
- Docking system to hold the spinal needle in place
- Sleeved spinal needle for smooth exit through the back eye





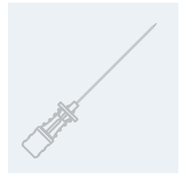
1 Markings on the Spinal Needle
The markings on the spinal needle show, when the tip leaves the back-eye.

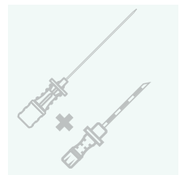
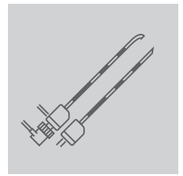
2 USER BENEFITS

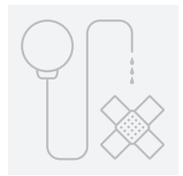
- The docking system allows rotation of the spinal needle even in the fixed position. Avoids the difficult and uncomfortable finger grip to steady fix the spinal needle in position
- The docking system ensures fixation of the spinal needle inside the tuohy needle after successful dura puncture and injection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

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

ULTRASOUND

B. Braun offers a large product range of echogenic needles and catheters. Stimuplex® Ultra 360®, Ultraplex® 360® and ContiplexS® Ultra 360® are B. Braun's latest generation of Ultrasound needles that combines enhanced Ultrasound visibility with smooth gliding properties and a good puncture quality. [11]

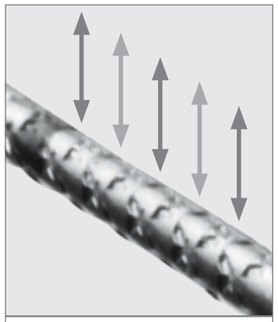
NERVE STIMULATION

For the electrical nerve stimulation B. Braun provides a wide range of stimulating needle and catheter systems for different applications. The well established nerve stimulator Stimuplex® HNS 12 completes the offer.

Visibility Without

The NeXt generations of Echogenic Nerve Block Needles

Circular (360°)
X-pattern-design

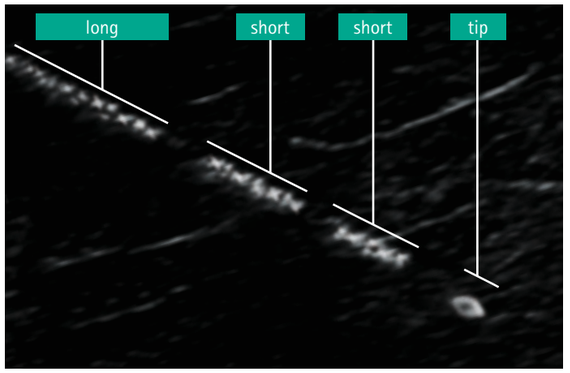


Reflection of the
Ultrasound waves

B. BRAUN ULTRASOUND NEEDLES

Stimuplex® Ultra 360®, Ultraplex® 360® and ContiplexS® Ultra 360® needles feature B. Braun's echogenic 360° X-pattern. The 'X' is a unique shape, also combined with a clear coating, it's intended to reflect more Ultrasound waves back to the probe than previous designs. [12]

The X-pattern is applied as a segmented safety-code (long-short-short-tip) and facilitates the needle tip identification. The Ultraline 360 portfolio is equipped with 30° back-cut bevel plus 360° X-shaped markings and a clear coating for better ultrasound visualisation and tip identification from all angles.[13]



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. [12]

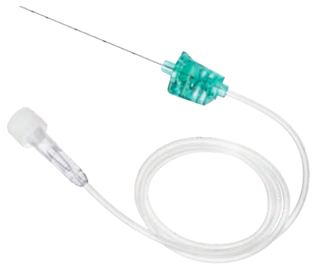
USER BENEFITS

- **Navigation**: Safety code for identification of the needle and needle tip position
- **Visibility**: 360° X-pattern and clear coating result in better Ultrasound visualisation 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

* Stimuplex® Ultra 360®, Ultraplex® 360® and ContiplexS® Ultra 360® are the latest generation of echogenic needles in the B. Braun range and not necessarily the latest generation of all echogenic needles available on the market

Products for Peripheral Nerve Blocks

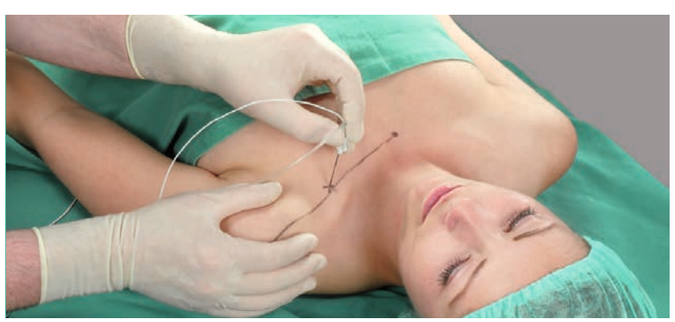
Single Shot Needles



Stimuplex® and Ultraplex® single shot needles include navigation markings and an ergonomic design to provide tactile feedback and better needle tip positioning for consistent puncture.

USER BENEFITS
- Improved design allowing better puncture and gliding characteristics
- Broad portfolio of needle lengths from 35 to 150 mm and G 24 to G 20
- Ergonomic needle hub design for enhanced tactile feedback

Cannula	Bevel	Insulation	Echogenic properties	Stimulating capabilities
	30°	Full Tip		
Stimuplex® A	✓	✓		✓
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.[14]

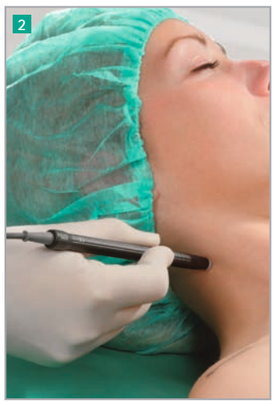
USER BENEFITS
- Wide range of catheter sets
- Harmonised set components
- Ultrasound visibility of Perifix® ONE catheter

Set	Bevel				Echogenic properties	Catheter
	15°	20°	30°	Tuohy		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

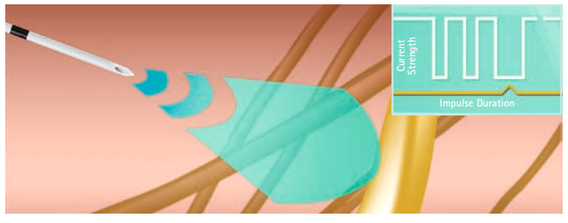
B. Braun Nerve Stimulator – Stimuplex® HNS 12 with SENSe

What is SENSe?

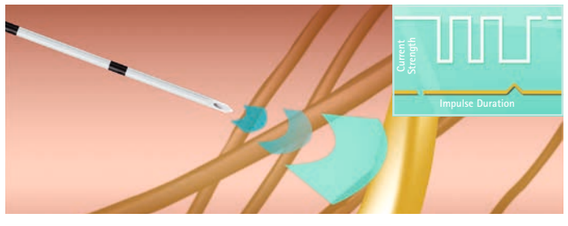
In practice, marginal needle movements often lead to loosing the muscle twitch. The SENSe technology (Sequential electrical Nerve Stimulation) is a sequence of two fixed impulse durations of 0.1 ms along with a third longer impulse duration.[15] Most traditional nerve stimulators emit two very short 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 retaining the visual feedback.

USER BENEFITS

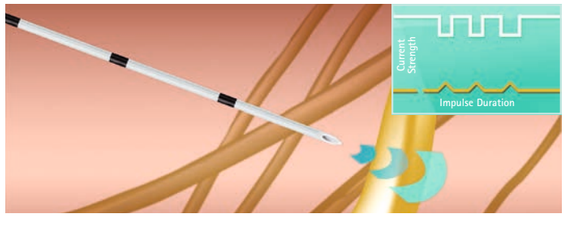
- Stimulation with SENSe-technology designed for more efficient nerve stimulation[15]
- Menus designed for easy control of sound and other settings
- Acoustic signals inform the user of any relevant deviations



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.

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
	Needles with 30° bevel			
	24 G x 1"	0.55 x 25 mm	25	4894251
	22 G x 2"	0.70 x 50 mm		4894502
	21 G x 4"	0.80 x 100 mm		4894260
	20 G x 6"	0.90 x 150 mm		4894278

NOTE -

Stimuplex® A needles will not be available after 2023

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 G x 1⅜"	0.70 x 35 mm	25	4892503-03	4892503NR-01
	22 G x 2"	0.70 x 50 mm		4892505-03	4892505NR-01
	22 G x 3⅛"	0.70 x 80 mm		4892508-03	4892508NR-01
	20 G x 4"	0.90 x 100 mm		4892510-03	4892510NR-01
	20 G x 6"	0.90 x 150 mm		4892515-03	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 G x 1⅜"	0.70 x 35 mm	25	4892603-01	4892603NR-01
	22 G x 2"	0.70 x 50 mm		4892605-01	4892605NR-01
	22 G x 3⅛"	0.70 x 80 mm		4892608-01	4892608NR-01
	20 G x 4"	0.90 x 100 mm		4892610-01	4892610NR-01
	20 G x 6"	0.90 x 150 mm		4892615-01	4892615NR-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)
Battery cover for Stimuplex® HNS 12	1	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

	Cannula			Contiplex® C catheter-over-the-needle system	Contiplex® S Ultra 360	Contiplex® Tuohy Ultra 360	Contiplex® ONE catheter (6 lateral eyes, open tip)	Perifix® ONE Catheter (6 lateral eyes, Closed tip)	Perifix® Catheter Connector 19G or 20/24G	Perifix® PinPad filter fixation	Perifix® Filter 0.2 µm, Pressure resistant up to 7 bar	Omnifix® syringe 5 ml Caution: Hypodermic needles (for skin infiltration) stay Luer	Units per box	Code no. (REF) Luer	Code no. (REF) NRFit®
	25G	18G	18G	Contiplex® ONE Catheter over needle system(mm)	20G Perifix® ONE catheter through needle system (mm)	Perifix® Catheter Connector	Perifix® PinPad	Perifix® Filter	Omnifix®						
	Size (G)	Size ø (mm)	Length (mm)	Cannula Bevel (°)		Tuohy Bevel									
	Luer and NRFit®			Luer and NRFit®					Luer and NRFit®		Luer and NRFit®	Luer and NRFit®			
Contiplex® C Sets															
Contiplex® C	25	0.53	190	15°			188		■	■	■	-	5	4898115	4898115NR
Contiplex® C	25	0.53	190	30°			188		■	■	■	-		4898130	4898130NR
Contiplex® S Ultra 360® Sets															
Contiplex® S Ultra 360	18	1.3	50		20°			400	■	■	■	■	10	4898650-27	4898650NR-27
Contiplex® S Ultra 360	18	1.3	100		20°			1000	■	■	■	■		4898610-27	4898610NR-27
Contiplex® S Ultra 360	18	1.3	150		20°			500	■	■	■	■		4898615-27	4898615NR-27
Contiplex® Tuohy Ultra 360® Sets															
Contiplex® Tuohy Ultra 360	18	1.3	40			■		400	■	■	■	■	10	4898704-27	4898704NR-01
Contiplex® Tuohy Ultra 360	18	1.3	50			■		400	■	■	■	■		4898705-27	4898705NR-01
Contiplex® Tuohy Ultra 360	18	1.3	100			■		1000	■	■	■	■		4898710-27	4898710NR-01
Contiplex® Tuohy Ultra 360	18	1.3	150			■		1000	■	■	■	■		4898715-27	4898715NR-01

Xperius® Ultrasound System

Responsive | Advanced | Simple

Xperius® is an Ultrasound system jointly developed by B. Braun and Philips which has been specifically designed to support the current and future needs in regional anaesthesia 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.

Designed to fit seamlessly at the anaesthetist's point of care

- Ergonomic design
- Convenient accessory bins
- High mobility & portability
- Designed by Philips & B. Braun

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.

High performance technology delivers exceptional image quality

- High definition imaging
- Enhanced needle visualisation
- New generation of probes

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 anaesthesia and vascular access.

Easy to use touchscreen user interface

- Mobile ultrasound solution helps the user align the needle with the probe in a user-friendly interface that can lead to reduction in procedural time.[16]
- Intuitive user experience
- Touch screen & gesture control
- Dedicated regional anaesthesia & vascular access presets

Note: This product may not be available in your region.
Please contact your local B. Braun representative for more information.

Touchscreen User Interface & Advanced Technology

- Multiple presets – 4 specific ones for regional anaesthesia / vascular access
- Touchscreen User Interface
- Start scanning in a few seconds
- Built-in Wi-Fi for DICOM data transfer
- Needle Vis Technology

Articulating Arm

- 270° Flexible rotation in every direction
- Height-adjustable

Core Ultrasound Technology

- Transducer with USB connector

Ready-to-go for Bedside Scanning

- Long lasting battery up to 3 h of scanning
- kg Lightweight and easy to handle

Convenient Storage

Everything needed for procedures is within reach

Onvision® Needle Tip Tracking

Precise | 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® better 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 easy to use manner – to improve pain relief and minimise the risk of unintended nerve puncture or collateral damage to surrounding tissue or vessel.[16,17,18]

Onvision® is an Ultrasound based Technology for reliable Needle Guidance

The dedicated Stimuplex® Onvision® needle is embedded with a tip sensor, which allows better detection of the tip location and displays this information in real time on the live Ultrasound image.[11] 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 [16,17]

- Tip visualisation 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 [16,17]

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

EMPOWERING

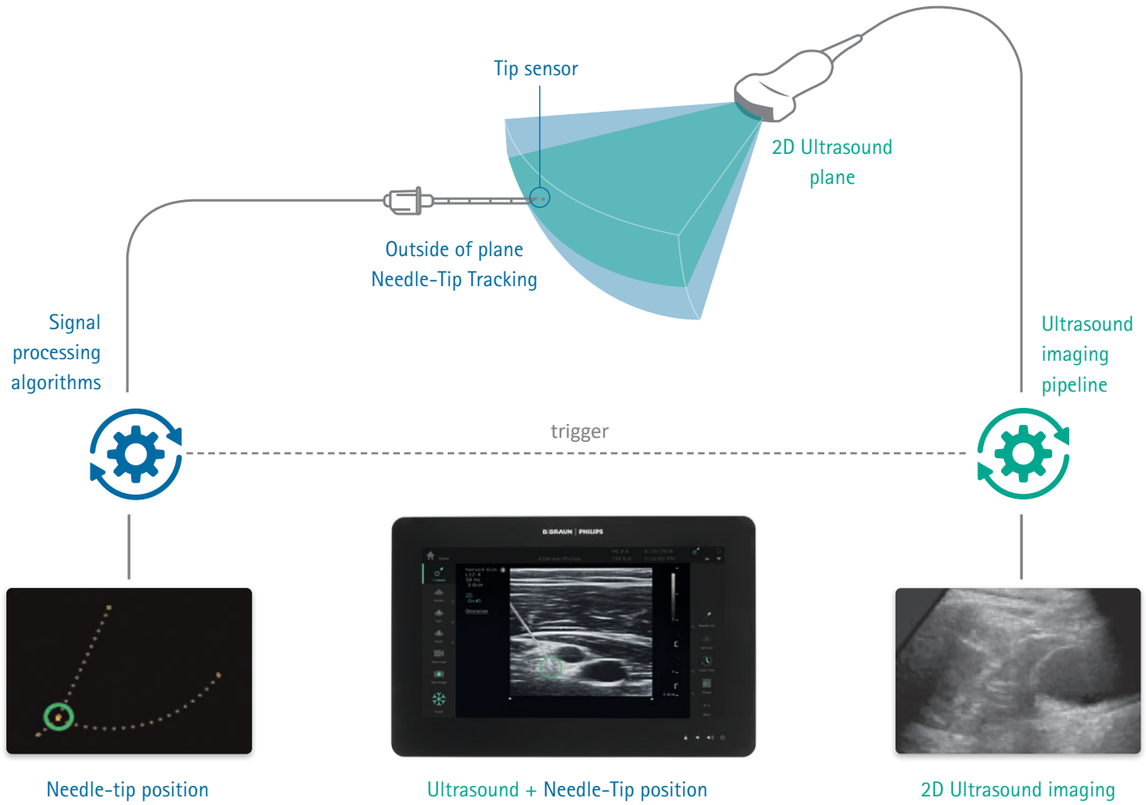
More anaesthetists can carry out regional anaesthesia [18]

- Better user experience
- Easy to adopt
- Can increase proficiency level

Note: This product may not be available in your region.
Please contact your local B. Braun representative for more information.

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. [19]



Ultrasound based Technology to improve Accuracy[19]

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

Portfolio Overview

ULTRASOUND SYSTEM AND ONVISION® TECHNOLOGY

Xperius®	Description	Units per box	Code no. (REF)
Xperius® Cart System with 1 transducer L12-4 and Onvision® Needle Tip Tracking Technology			
with Onvision®	▪ 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, Colour Doppler, Colour Power Angio (CPA), M-Mode	1	NUSM621
Xperius® Cart System with 1 transducer L12-4			
	▪ 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, Colour Doppler, Colour Power Angio (CPA), M-Mode	1	NUSM623
Xperius® Stand-alone Tablet with 1 transducer L12-4			
	▪ 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
Peripherals			
	Printer Sony UP-D711MD ▪ High-quality digital graphic printer ▪ Easy to connect within dedicated Xperius® printer slot ▪ Dimensions: 7 cm × 14 cm × 12.5 cm (H/W/D) ▪ Weight: 1 kg ▪ Monochrome, black/white, A7 paper size	1	NUSM620

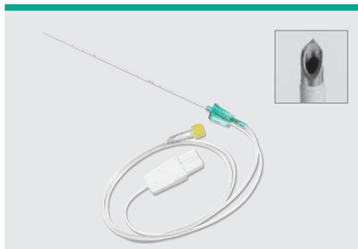
Note: This product may not be available in your region.
Please contact your local B. Braun representative for more information.

COMPLEMENTARY PRODUCTS

Xperius® Upgrade Items	Description	Units per box	Code no. (REF)
Single Transducer Linear			
	L12-4 broadband linear array transducer ▪ 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			
	C5-2 broadband curved array transducer ▪ 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 G x 2"	0.70 x 50 mm	10	4892705-01
	22 G x 3 1/8"	0.70 x 80 mm		4892708-01
	20 G x 4"	0.90 x 100 mm		4892710-01
	20 G x 4 3/4"	0.90 x 120 mm		4892712-01
	20 G 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 G x 2"	0.70 x 50 mm	10	4892705NR-01
	22 G x 3 1/8"	0.70 x 80 mm		4892708NR-01
	20 G x 4"	0.90 x 100 mm		4892710NR-01
	20 G x 4 3/4"	0.90 x 120 mm		4892712NR-01
	20 G x 6"	0.90 x 150 mm		4892715NR-01

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