

PAJUNK®



REGIONAL ANAESTHESIA
& PAIN MANAGEMENT

Neuraxial Anaesthesia *Product Catalogue*



EPI SPIN LOCK & SPROTTE® LUMBAR ANESTHESIA'S FAVORITE POWER COUPLE

EpiSpin Lock offers smooth and stable spinal puncture while minimizing post-spinal headache with the original SPROTTE® atraumatic needle.

 MADE IN GERMANY

EpiSpin Lock Combined Spinal-Epidural Anesthesia (CSEA)

- 1 Unique Locking System
- 2 SPROTTE locks in place through the back-eye of the Tuohy, removing the need for a third hand
- 3 When Spinal Anesthesia is complete, EpiSpin Lock rotates 90° and easily disconnects from the Tuohy in preparation for Epidural Anesthesia



SPROTTE® Needles for Atraumatic Spinal Anesthesia

- 1 The acute slanted tip significantly reduces the risk of PDRH¹
- 2 The rounded edges of the lateral eye minimize trauma and provide excellent tactile feedback
- 3 Clear magnifying needle hub allows for easy visualization of CSF

1. PDRH: Post-Dural Puncture Headache
2. CSF: Cerebrospinal Fluid
3. Lateral Eye: The lateral eye of the needle is designed to provide excellent tactile feedback and minimize trauma to the dura mater.

...PLES & AN ONLINE DEMO NOW!
...pajunkusa.com

FAJUNK



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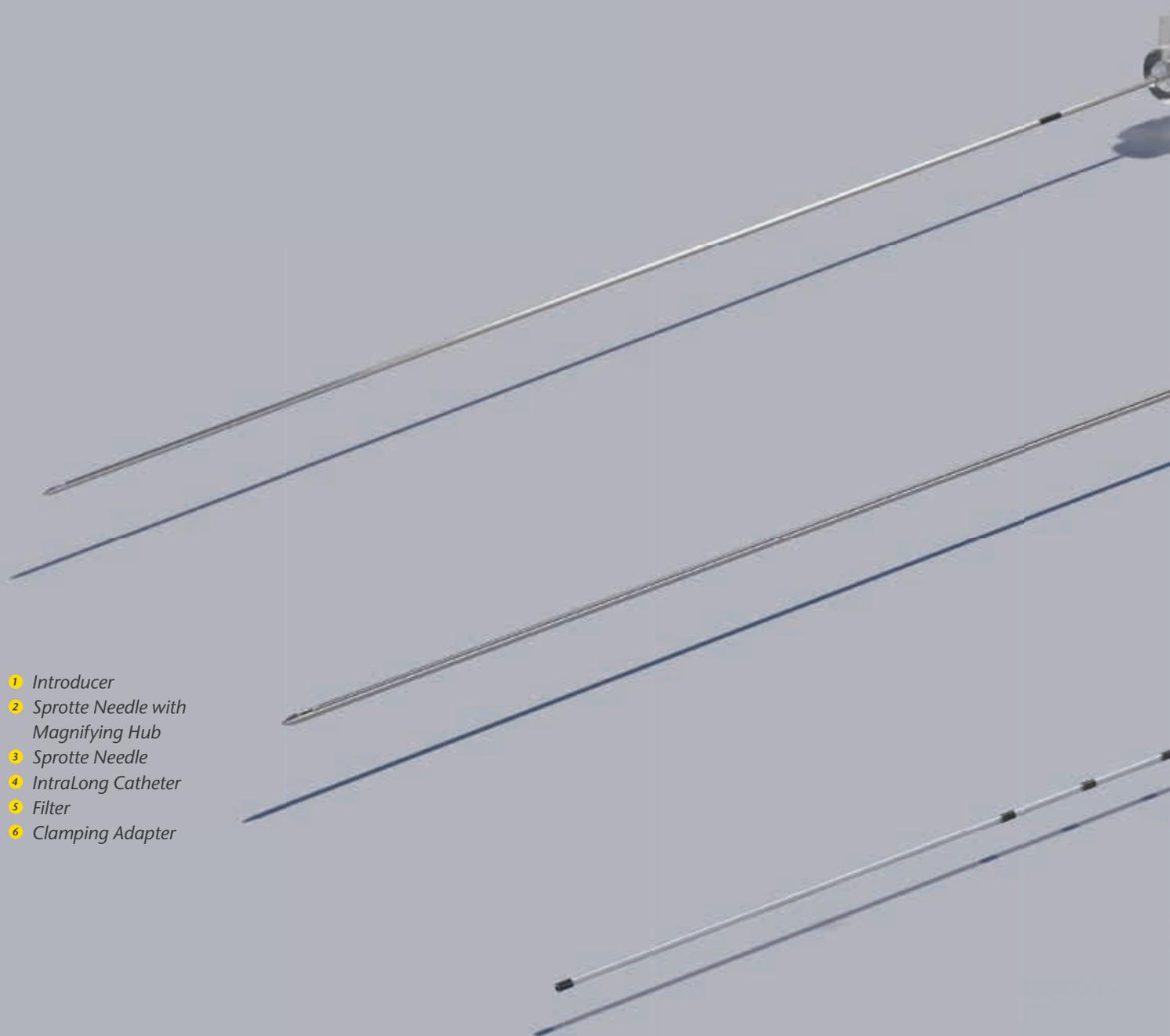
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Spinal Anaesthesia

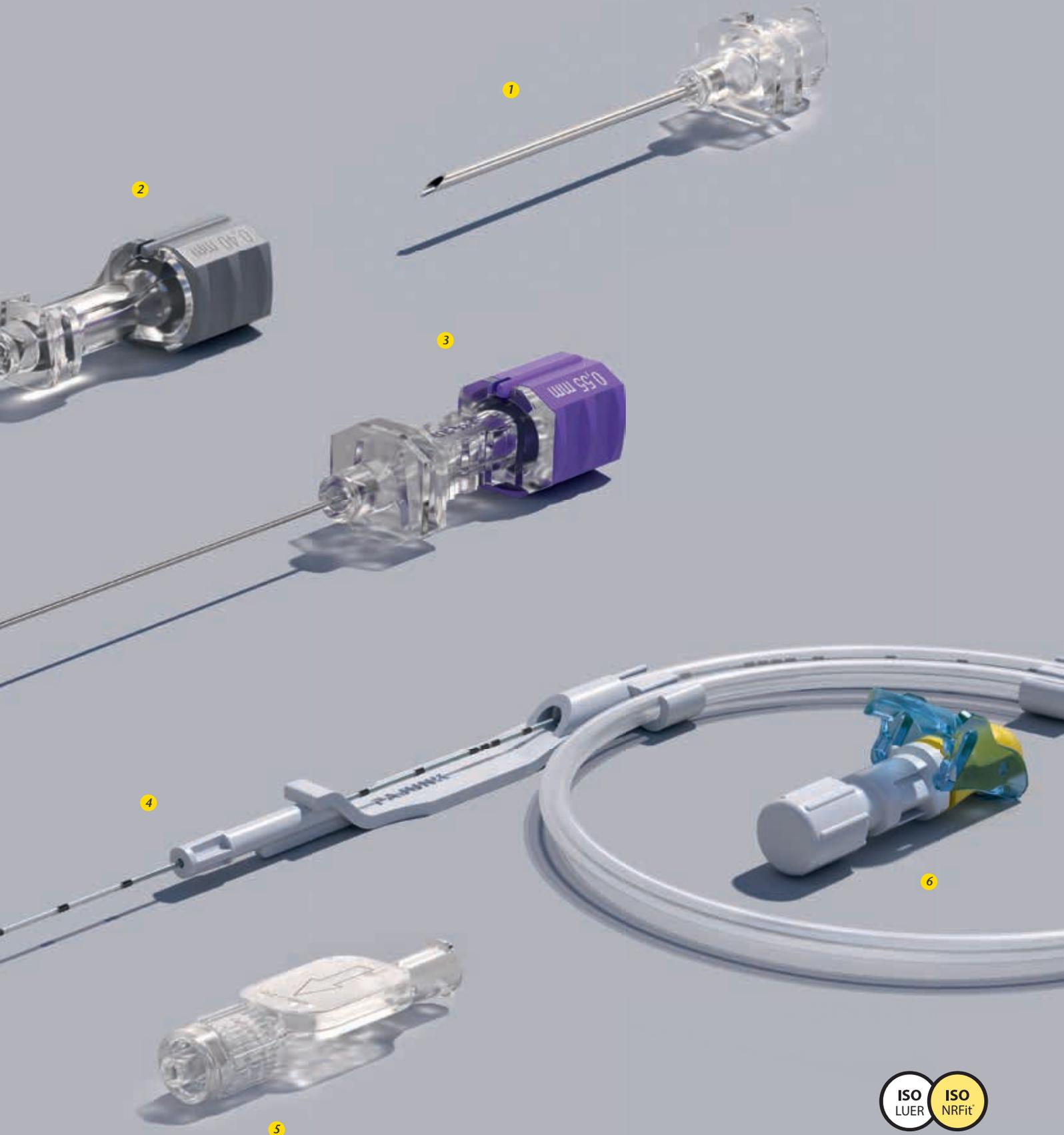
Needles and Catheters for Atraumatic Spinal Anaesthesia

With the introduction of the first atraumatic SPROTTE® needle at the end of the 1970s, spinal anaesthesia was rehabilitated as a fully accepted alternative to general anaesthesia. A unique tip design is the secret of its success. Sprotte's atraumatic puncture and optimal gliding properties minimise possible injuries and prevent foreign bodies and tissue particles from being carried into the subarachnoid space, while reducing the incidence of post-dural puncture headache (PDPH).

PAJUNK® offers the Sprotte needle as a single shot option and as a Continuous Spinal Anaesthesia catheter system.



- 1 Introducer
- 2 Sprotte Needle with Magnifying Hub
- 3 Sprotte Needle
- 4 IntraLong Catheter
- 5 Filter
- 6 Clamping Adapter



Also available in **NRFit**

SPROTTE® Needles

Needles for Atraumatic Spinal Anaesthesia



Atraumatic Tip Design

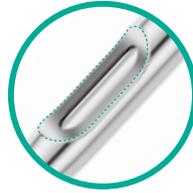
The ogive shaped tip significantly reduces the risk of PDPH and the rounded edges of the lateral eye minimise trauma to the dura mater.

- ▶ Minimises chance of PDPH¹
- ▶ Consistent tactile feedback



Highest Processing Quality

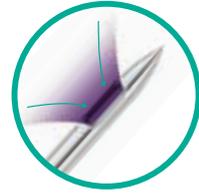
- ▶ High quality stainless steel needle for increased stability
- ▶ Smoothly polished and burr-free surface and inner lumen designed for optimised gliding properties
- ▶ Consistent feel and reliable performance



Lateral Eye

Burr-free, rounded atraumatic edges

- ▶ Optimised gliding properties
- ▶ Minimum chance of tissue coring and carry-over into the subarachnoid space



Optimal Lateral Eye Size and Placement

- ▶ Unobstructed backflow, even if the eye is partially blocked by the arachnoid membrane
- ▶ Allows for quicker CSF flashback²



Precision-Ground Metal Stylet

- ▶ Lateral eye closes precisely to minimise chance of tissue coring³
- ▶ Polished, rounded tip prevents abrasion on the inner needle tube



Standard Hub

- ▶ Designed for rapid detection of even the smallest quantities of CSF
- ▶ Reduced inner space



Magnifying Hub

- ▶ Clear, magnifying needle hub allows for easy visualisation of blood or CSF and easier detection of CSF flashback



Colour-Coded Needle Hub with Size Indication

- ▶ Easy identification of needle size



Introducer with Facet Tip

- ▶ Diameter and length perfectly matched to each Spinal needle size
- ▶ Minimal reduction of useable working length of the Spinal needle by the Introducer
- ▶ Funnel-shaped hub to reduce chance of Spinal needle tip damage during insertion



Portfolio Excellence

- ▶ Wide needle range with different diameters and lengths
- ▶ Special designs for pediatrics and obese patients

Sprotte Needles

Description	Introducer	Item No. Standard	Item No. Magnifying hub	NRFit® Item no. Magnifying hub	NRFit Set Item no.* Magnifying hub	PU
27G x 25 mm (1")			101151-27A			25
27G x 35 mm (1 1/3")			111151-27A			25
27G x 70 mm (2 3/4")	30 mm (1 1/5")		121151-27B			25
27G x 90 mm (3 1/2")	30 mm (1 1/5")		121151-27A	021163-27A	021166-27A	25

*NRFit Sets include a Filter Needle NRFit 18G x 50 mm, Syringe NRFit 3ml Slip, Syringe NRFit 5ml Slip

Description	Introducer	Item No. Standard	Item No. Magnifying hub	NRFit Item no. Magnifying hub	NRFit Set Item no.* Magnifying hub	PU
27G x 90 mm (3 1/2")	40 mm (1 3/5")			211163-27A	211166-27A	25
27G x 103 mm (4")	40 mm (1 3/5")		141151-27A	041163-27A	041166-27A	25
27G x 123 mm (4 4/5")			231151-27A			10
27G x 120 mm (4 3/4")				231163-27A		10
27G x 120 mm (4 3/4")	40 mm (1 3/5")		151151-27A	031163-27A	031166-27A	10
25G x 35 mm (1 1/3")		001151-29E		001163-29E	001166-29E	25
25G x 70 mm (2 3/4")	30 mm (1 1/5")	021151-29B				25
25G x 90 mm (3 1/2")		501151-29A		501163-29A	501166-29A	25
25G x 90 mm (3 1/2")	30 mm (1 1/5")	021151-29A	511151-29A	021163-29A	021166-29A	25
25G x 90 mm (3 1/2")	40 mm (1 3/5")			211163-29A	211166-29A	25
25G x 103 mm (4")	40 mm (1 3/5")	041151-29A	161151-29A	041163-29A	041166-29A	25
25G x 120 mm (4 3/4")		031151-29A		031163-29A	031166-29A	10
25G x 120 mm (4 3/4")	40 mm (1 3/5")	051151-29A	171151-29A	051163-29A	051166-29A	10
25G x 123 mm (4 4/5")		151151-29A				10
25G x 150 mm (6")				261163-29A		10
25G x 150 mm (6")	40 mm (1 3/5")	061151-29A			061166-29A	10
24G x 25 mm (1")		001151-30D		001163-30D	001166-30D	25
24G x 35 mm (1 1/3")		001151-30E		001163-30E	001166-30E	25
24G x 70 mm (2 3/4")		001151-30B			001166-30B	25
24G x 70 mm (2 3/4")	30 mm (1 1/5")	021151-30B				25
24G x 90 mm (3 1/2")		001151-30A		001163-30A	001166-30A	25
24G x 90 mm (3 1/2")	30 mm (1 1/5")	121151-30A		121163-30A	121166-30A	25
24G x 103 mm (4")	40 mm (1 3/5")	021151-30A		021163-30A	521166-30A	25
24G x 120 mm (4 3/4")		031151-30A				10
24G x 120 mm (4 3/4")	40 mm (1 3/5")	041151-30A		041163-30A	041166-30A	10
24G x 150 mm (6")		141151-30A				10
24G x 150 mm (6")	40 mm (1 3/5")	131151-30A		131163-30A	131166-30A	10
22G x 50 mm (2")		071151-30C		071163-30C	071166-30C	25
22G x 70 mm (2 3/4")		051151-30C				25
22G x 70 mm (2 3/4")	30 mm (1 1/5")	051151-30B				25
22G x 90 mm (3 1/2")		001151-30C		001163-30C		25
22G x 90 mm (3 1/2")	30 mm (1 1/5")	021151-30C		021163-30C	021166-30C	25
22G x 103 mm (4")		521151-30C		521163-30C		25
22G x 103 mm (4")	40 mm (1 3/5")	221151-30C		221163-30C	221166-30C	25
22G x 120 mm (4 3/4")				031163-30C		10
22G x 120 mm (4 3/4")	40 mm (1 3/5")	131151-30C		131163-30C		10
22G x 150 mm (6")		041151-30C				10
22G x 150 mm (6")	40 mm (1 3/5")	141151-30C		141163-30C	141166-30C	10

Sprotte Introducer

Description	Sprotte Size	Item no.	NRFit Item no.	PU
0.70 x 30 mm (1 1/5")	27G	071151-30L		25
0.80 x 30 mm (1 1/5")	24G, 25G	021151-30L	021163-30L*	25
0.80 x 40 mm (1 3/5")	24G, 25G	021151-30M		25
1.00 x 30 mm (1 1/5")	22G	001151-30L	001163-30L	25
1.00 x 40 mm (1 3/5")	22G	001151-30M	001163-30M	25
1.10 x 30 mm (1 1/5")	21G	051151-30L		25
1.30 x 30 mm (1 1/5")	19G	091151-30L		25

*Also suitable for Sprotte size 27G

IntraLong

Catheter



Catheter with Closed Tip

- ▶ With three lateral openings



Depth Markings

- ▶ Graduations on the first 30 cm
- ▶ Easy determination of catheter positioning
- ▶ Easy to read and identify

Needle (SPROTTE® SPECIAL)



Atraumatic Tip Design

The ogive shaped tip significantly reduces the risk of PDPH and the rounded edges of the lateral eye minimise trauma to the dura mater.

- ▶ Minimises chance of PDPH¹
- ▶ Consistent tactile feedback



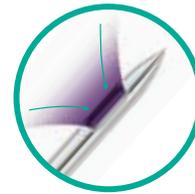
Sprotte Special Tip with Ramp

- ▶ Reduces the chance of shearing off catheter
- ▶ Easy catheter threading



Lateral Eye

- ▶ Burr-free, rounded atraumatic edges
- ▶ Optimised gliding properties
- ▶ Minimum chance of tissue coring and carry-over into the subarachnoid space



Optimal Lateral Eye Size and Placement

- ▶ Unobstructed backflow, even if the eye is partially blocked by the arachnoid membrane
- ▶ Allows for quicker CSF flashback²



Precision-Ground Metal Stylet

- ▶ Lateral eye closes precisely to minimise chance of tissue coring³
- ▶ Polished, rounded tip prevents abrasion on the inner needle tube



Highest Processing Quality

- ▶ High quality stainless steel needle for increased stability
- ▶ Smoothly polished and burr-free surface and inner lumen designed for optimised gliding properties
- ▶ Consistent feel and reliable performance



Standard Hub

- ▶ Designed for rapid detection of even the smallest quantities of CSF
- ▶ Reduced inner space



Colour-Coded Needle Hub with Size Indication

- ▶ Easy identification of needle size

IntraLong

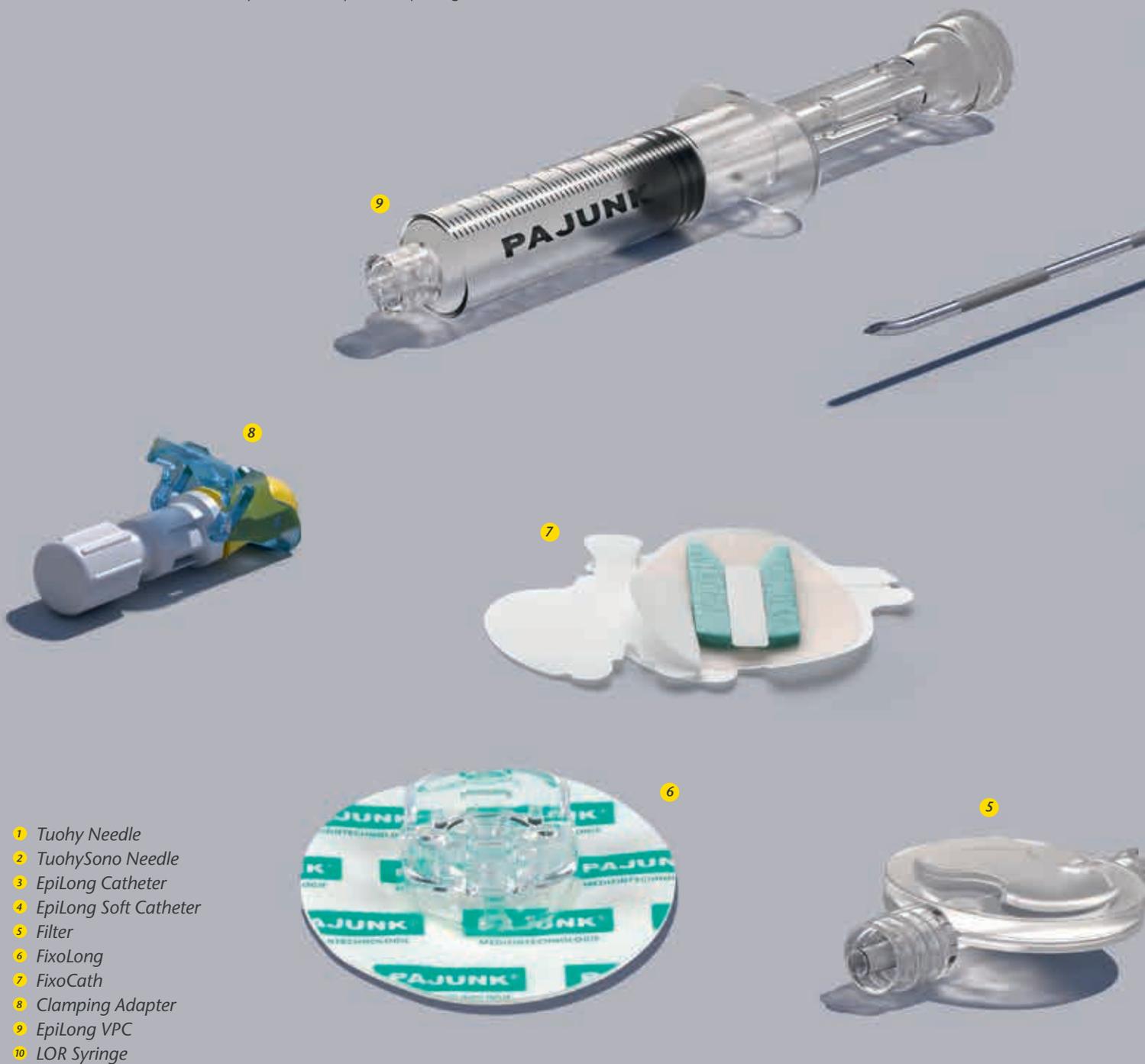
Sprotte Special Needle Size	Catheter	Item no.	NRFit® Item no.	PU	Filter	Clamping Adapter	1 ml Luer Syringe
22G x 90 mm (3 1/2")	27G x 90 cm (35")	21151-30CS	22161-30CS	10	●	●	
22G x 90 mm (3 1/2")	27G x 90 cm (35")	31151-30CS		10	●	●	●
22G x 103 mm (4")	27G x 90 cm (35")	21151-30CL		10	●	●	
21G x 90 mm (3 1/2")	25G x 90 cm (35")	31151-30GS	22161-30GS	10	●	●	●

Epidural Anaesthesia

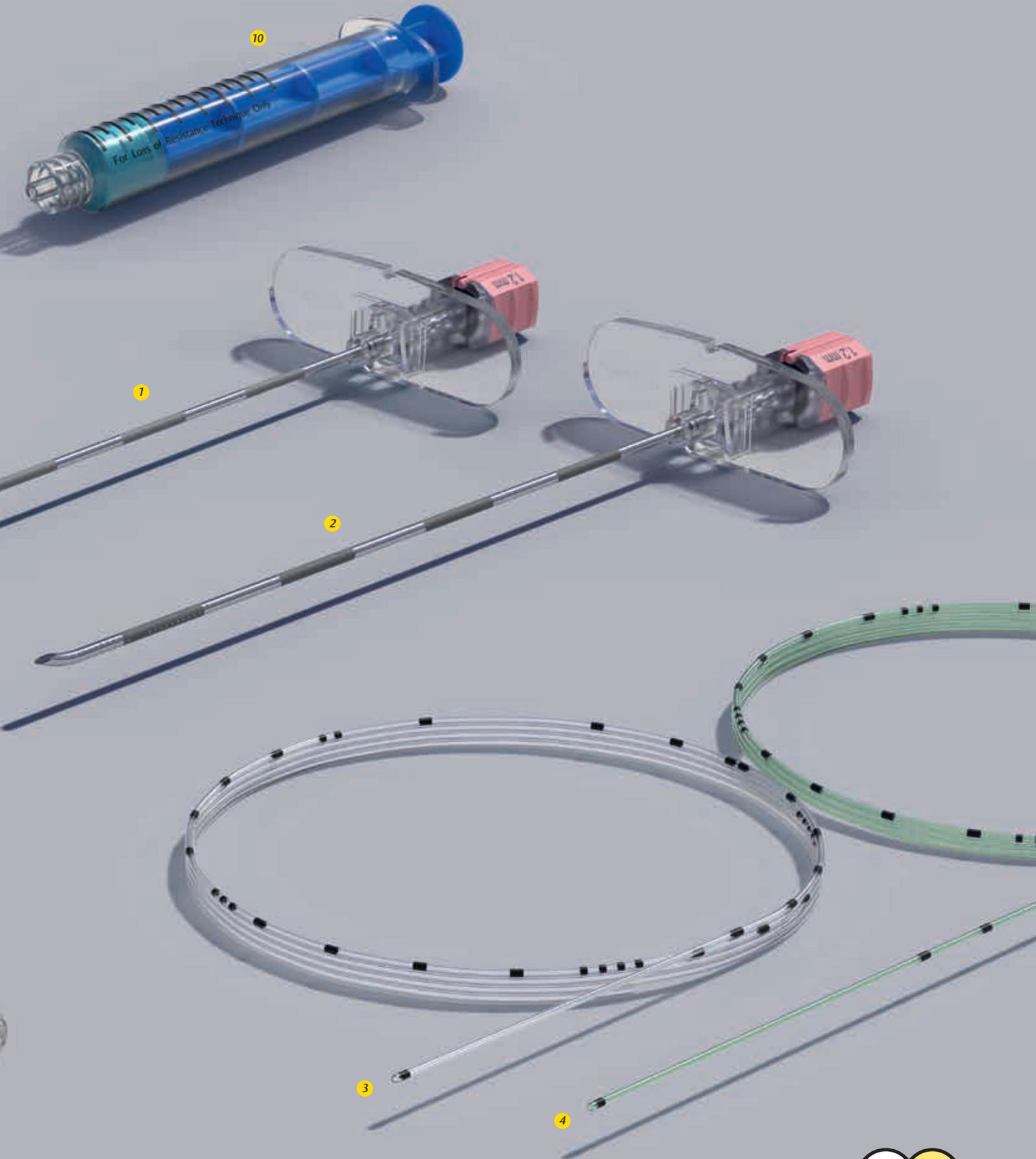
EpiLong – Sets for Continuous Epidural Anaesthesia

Epidural Anaesthesia has served as a proven anaesthetic method for many years. PAJUNK® supports this anaesthesia technique with a selection of continuous Epidural Anaesthesia sets.

- The curved Tuohy tip allows for precise catheter placement in the desired position for best anaesthesia quality.
- Stainless steel helical coil and soft catheter material combine maximum flexibility and stability in the EpiLong Soft catheter



- 1 Tuohy Needle
- 2 TuohySono Needle
- 3 EpiLong Catheter
- 4 EpiLong Soft Catheter
- 5 Filter
- 6 FixoLong
- 7 FixoCath
- 8 Clamping Adapter
- 9 EpiLong VPC
- 10 LOR Syringe



Also available in **NRFit**

EpiLong Needles

Tuohy – Epidural Injection Needles



Depth Markings

- ▶ Easy to read and identify



Precision-Ground Metal Stylet

- ▶ Flush ends of metal stylet and needle reduce the risk of tissue displacement
- ▶ Increased needle stability



Detachable Plastic Wings

- ▶ Optimum handling for different gripping techniques

Tuohy Needle with metal stylet and wings

Tuohy	Item no.	NRFit Item no.	PU
19G x 50 mm (2")*	1150-4I050		25
19G x 80 mm (3 1/4")	1150-4I080		25
19G x 90 mm (3 1/2")	1150-4I090		25
18G x 50 mm (2")*	1150-4K050		25
18G x 80 mm (3 1/4")	1150-4K080	1166-4K080	25
18G x 90 mm (3 1/2")	1150-4K090	1166-4K090	25
18G x 120 mm (4 3/4")	1150-4K120	1166-4K120	10
18G x 150 mm (6")	1150-4K150	1166-4K150	10
17G x 80 mm (3 1/4")	1150-4M080		25
17G x 90 mm (3 1/2")	1150-4M090		25
17G x 120 mm (4 3/4")	1150-4M120		10
17G x 150 mm (6")	1150-4M150	1166-4M150	10
16G x 80 mm (3 1/4")	1150-4O080		25
16G x 90 mm (3 1/2")	1150-4O090		25
16G x 120 mm (4 3/4")	1150-4O120		10
16G x 150 mm (6")	1150-4O150	1166-4O150	10

Tuohy Needle with plastic stylet and wings

Tuohy	Item no.	NRFit Item no.	PU
22G x 90 mm (3 1/2")		1166-6E091	25
21G x 90 mm (3 1/2")		1166-6F091	25
20G x 90 mm (3 1/2")		1166-6G091	25
19G x 90 mm (3 1/2")	1150-6I091	1166-6I091	25
18G x 80 mm (3 1/4")	1150-6K081	1166-6K081	25
18G x 90 mm (3 1/2")	1150-6K091	1166-6K091	25
17G x 90 mm (3 1/2")	1150-6M091	1166-6M091	25
16G x 80 mm (3 1/4")		1166-6O081	25
16G x 90 mm (3 1/2")	1150-6O091	1166-6O091	25

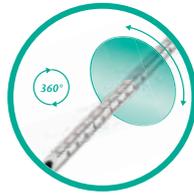
* with 0.5 cm graduation

TuohySono – Echogenic Epidural Injection Needle



Echogenic Needle Tip

- ▶ Improved needle tip visibility under ultrasound



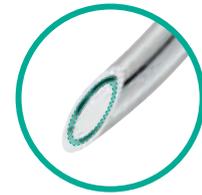
Cornerstone Reflectors

- ▶ 360 degree graduations on the first 20 mm of the needle
- ▶ Optimised ultrasound visibility of needle shaft⁴
- ▶ Reliable and optimised needle visualisation at any angle^{5,6}



Depth Markings

- ▶ Easy to read and identify



Precision-Ground Metal Stylet

- ▶ Flush ends of metal stylet and needle reduce the risk of tissue displacement
- ▶ Increased needle stability



Detachable Plastic Wings

- ▶ Optimum handling for different gripping techniques

TuohySono Needle with metal stylet and wings

TuohySono	Item no.	NRFit Item no.	PU
18G x 50 mm (2")*	1085-4K050		25
18G x 90 mm (3 1/2")	1085-4K090		25
18G x 120 mm (4 3/4")	1085-4K120		10
17G x 90 mm (3 1/2")	1085-4M090		25

Caudal – Injection Needles with Crawford Bevel



Crawford Tip

- ▶ Blunt tip for safer puncture of the epidural space
- ▶ Designed especially for Caudal Anaesthesia



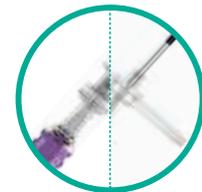
Precision-Ground Metal Stylet

- ▶ Minimised tissue coring
- ▶ Smooth tissue gliding characteristics



Depth Stop and Depth Markings

- ▶ Adjustable depth stop
- ▶ Markings in 1 cm steps for easy operation of the puncture depth



Detachable Plastic Wings

- ▶ Optimum handling for different gripping techniques

Caudal Needle with wings

Caudal	Item no.	NRFit Item no.	NRFit Set Item no. incl. Filter	PU
25G x 25 mm (1")	1149-12C025	1163-12C025	1166-12C025	25
25G x 50 mm (2")	1149-12C050	1163-12C050	1166-12C050	25
23G x 25 mm (1")	1149-12D025			25
22G x 40 mm (1 5/8")	1149-12E040	1163-12E040	1166-12E040	25
22G x 60 mm (2 3/8")	1149-12E060	1163-12E060	1166-12E060	25
22G x 80 mm (3 1/4")	1149-12E080	1163-12E080	1166-12E080	25

EpiLong Catheters

EpiLong Standard – Epidural Injection Catheters



Catheter Options

- ▶ Transparent material
- ▶ Optional with closed tip and three lateral openings or with central opening



Depth Markings

- ▶ Graduations on the first 30 cm
- ▶ Easy determination of catheter positioning
- ▶ Easy to read and identify

EpiLong Soft – Epidural Injection Catheters



Soft Tip

- ▶ Minimises the risk of accidental injury to the blood vessels and dura
- ▶ Closed tip and six lateral openings



Stainless Steel Helical Coil

- ▶ Improved catheter flexibility and stability resulting in reduced chance of kinking⁷
- ▶ Radiopaque



Depth Markings

- ▶ Graduations on the first 30 cm
- ▶ Easy determination of catheter positioning
- ▶ Easy to read and identify

EpiLong Catheter

EpiLong Cath	Tip	Lateral openings	Item no.	NRFit® Item no.	PU	Steel mandrin	Stainless steel helical coil	Clamping Adapter
20G x 90 cm (35")	closed	3	001151-37C		10	●		●
20G x 90 cm (35")	closed	3	021151-37C	021163-37C	10			●
20G x 90 cm (35")	open		011151-37C		10	●		●
20G x 90 cm (35")	open		031163-37C		10			●
19G x 90 cm (35")	closed	3	001151-37A		10	●		●
19G x 90 cm (35")	closed	3	021151-37A	021163-37A	10			●
19G x 90 cm (35")	open		031151-37A		10			●
<hr/>								
EpiLong Soft Cath	Tip	Lateral openings	Item no.	NRFit Item no.	PU			
20G x 90 cm (35")	closed	6	041151-37R	041163-37R	10		●	●
19G x 90 cm (35")	closed	6	041151-37P		10		●	●

EpiLong I + EpiLong Tuohy

Tuohy with plastic or metal stylet, EpiLong Standard catheter is optionally available with closed tip and three lateral openings or with a central opening.

EpiLong I

Tuohy Needle with metal stylet	Catheter Closed tip, 3 lateral openings	Item no.	NRFit Item no.	NRFit Set Item no.*	PU	Filter	Clamping Adapter	LOR Syringe
19G x 50 mm (1 3/4")	25G x 50 cm (20")		0131166-51		10	●	●	●
19G x 50 mm (1 3/4")	23G x 50 cm (20")	0131153-50	0131163-50		10	●	●	●
19G x 50 mm (1 3/4")	21G x 50 cm (20")		0131163-51		10	●	●	●
18G x 90 mm (3 1/2")	20G x 90 cm (35")	0431155-51	0431165-51	1432165-51	10	●	●	●
17G x 90 mm (3 1/2")	19G x 90 cm (35")	0431155-48	0431165-48	1432165-48	10	●	●	●

EpiLong Tuohy

Tuohy Needle with plastic stylet	Catheter central opening	Item no.	NRFit Item no.	NRFit Set Item no.*	PU	FixoLong	FixoCath	Filter	Clamping Adapter	LOR Syringe
18G x 90 mm (3 1/2")	20G x 90 cm (35")	0521152-51			10			●	●	
18G x 90 mm (3 1/2")	20G x 90 cm (35")	0631152-51			10			●	●	●

Tuohy Needle with plastic stylet	Catheter Closed tip, 3 lateral openings	Item no.	NRFit Item no.	NRFit Set Item no.*	PU	FixoLong	FixoCath	Filter	Clamping Adapter	LOR Syringe
18G x 80 mm (3 1/4")	20G x 90 cm (35")	0531153-51			10	●		●	●	●
18G x 80 mm (3 1/4")	20G x 90 cm (35")	0331153-51		1332163-51	10			●	●	●
18G x 90 mm (3 1/2")	20G x 90 cm (35")	0521152-51			10			●	●	●
18G x 90 mm (3 1/2")	20G x 90 cm (35")	0331152-51	0331162-51	1332162-51	10			●	●	●
18G x 90 mm (3 1/2")	20G x 90 cm (35")	0331252-51			10		●	●	●	●
18G x 90 mm (3 1/2")	20G x 90 cm (35")	0531152-51			10	●		●	●	●
17G x 80 mm (3 1/4")	19G x 90 cm (35")	0331153-48	0331163-48	1332163-48	10			●	●	●
17G x 90 mm (3 1/2")	19G x 90 cm (35")	0331152-48	0331162-48	1332162-48	10			●	●	●
16G x 80 mm (3 1/4")	19G x 90 cm (35")		0331163-49	1332163-49	10			●	●	●
16G x 90 mm (3 1/2")	19G x 90 cm (35")		0331162-49	1332162-49	10			●	●	●
16G x 90 mm (3 1/2")	19G x 90 cm (35")	0321152-49			10			●	●	

EpiLong Tuohy VPC

Tuohy Needle with plastic stylet	Catheter Closed tip, 3 lateral openings	Item no.	NRFit Item no.	NRFit Set Item no.*	PU	Filter	Clamping Adapter	LOR Syringe
18G x 80 mm (3 1/4")	20G x 90 cm (3 1/2")	0341153-51			10	●	●	●
18G x 90 mm (3 1/2")	20G x 90 cm (3 1/2")	0341152-51			10	●	●	●
17G x 80 mm (3 1/4")	19G x 90 cm (3 1/2")	0341153-48			10	●	●	●
17G x 90 mm (3 1/2")	19G x 90 cm (3 1/2")	0341152-48			10	●	●	●

EpiLong Soft + EpiLong Soft Sono

Tuohy/Tuohy Sono with metal stylet, EpiLong Soft epidural catheter with stainless steel helical coil, closed tip and six lateral openings

EpiLong Soft

Tuohy Needle with metal stylet	EpiLong Catheter Closed tip, 6 lateral openings	Item no.	NRFit® Set* Item no.	PU	FixoLong	Filter	Clamping Adapter	LOR Syringe
18G x 90 mm (3 1/2")	20G x 90 cm (35")	0431157-51	1432167-51	10	●	●	●	●
17G x 90 mm (3 1/2")	19G x 90 cm (35")	0431157-48	1432167-48	10	●	●	●	●
17G x 90 mm (3 1/2")	19G x 90 cm (35")	0421157-48		10	●	●	●	

EpiLong Soft Sono

Tuohy Needle with metal stylet	EpiLong Catheter Closed tip, 6 lateral openings	Item no.	NRFit Set* Item no.	PU	FixoLong	Filter	Clamping Adapter	LOR Syringe
18G x 50 mm (2")	20G x 90 cm (35")	0631187-51		10	●	●	●	●
18G x 90 mm (3 1/2")	20G x 90 cm (35")	0431187-51		10	●	●	●	●
17G x 90 mm (3 1/2")	19G x 90 cm (35")	0431187-48		10	●	●	●	

EpiLong Soft VPC

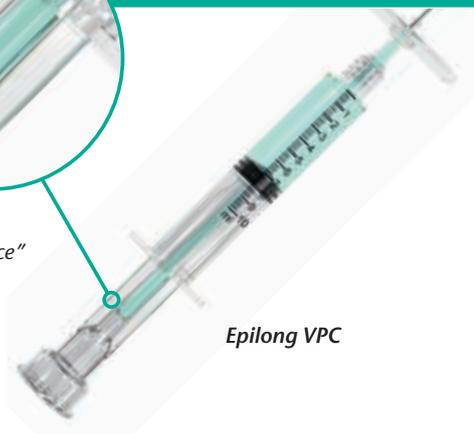
Tuohy Needle with metal stylet	EpiLong Catheter Closed tip, 6 lateral openings	Item no.	NRFit Set* Item no.	PU	FixoLong	Filter	Clamping Adapter	LOR Syringe
17G x 90 mm (3 1/2")	19G x 90 cm (35")	0441157-48		10	●	●	●	●
18G x 90 mm (3 1/2")	20G x 90 cm (35")	0441157-51		10	●	●	●	●

*NRFit Sets include a Filter Needle NRFit 18G x 50 mm, Syringe NRFit 5ml Lock, Syringe NRFit 10ml Lock

We make the invisible visible



Visualisation of
"Loss of Resistance"



EpiLong VPC

WHAT IS THE EPILONG VISUAL PRESSURE CONTROL (VPC) SYRINGE?

The VPC syringe offers a reliable alternative to the conventional tactile Loss of Resistance technique by **visually indicating** even the smallest pressure changes when entering the Epidural Space.

To learn more about the VPC syringe, visit www.EpiLong-VPC.com



LEARN MORE AT

info@pajunk.com · pajunk.com

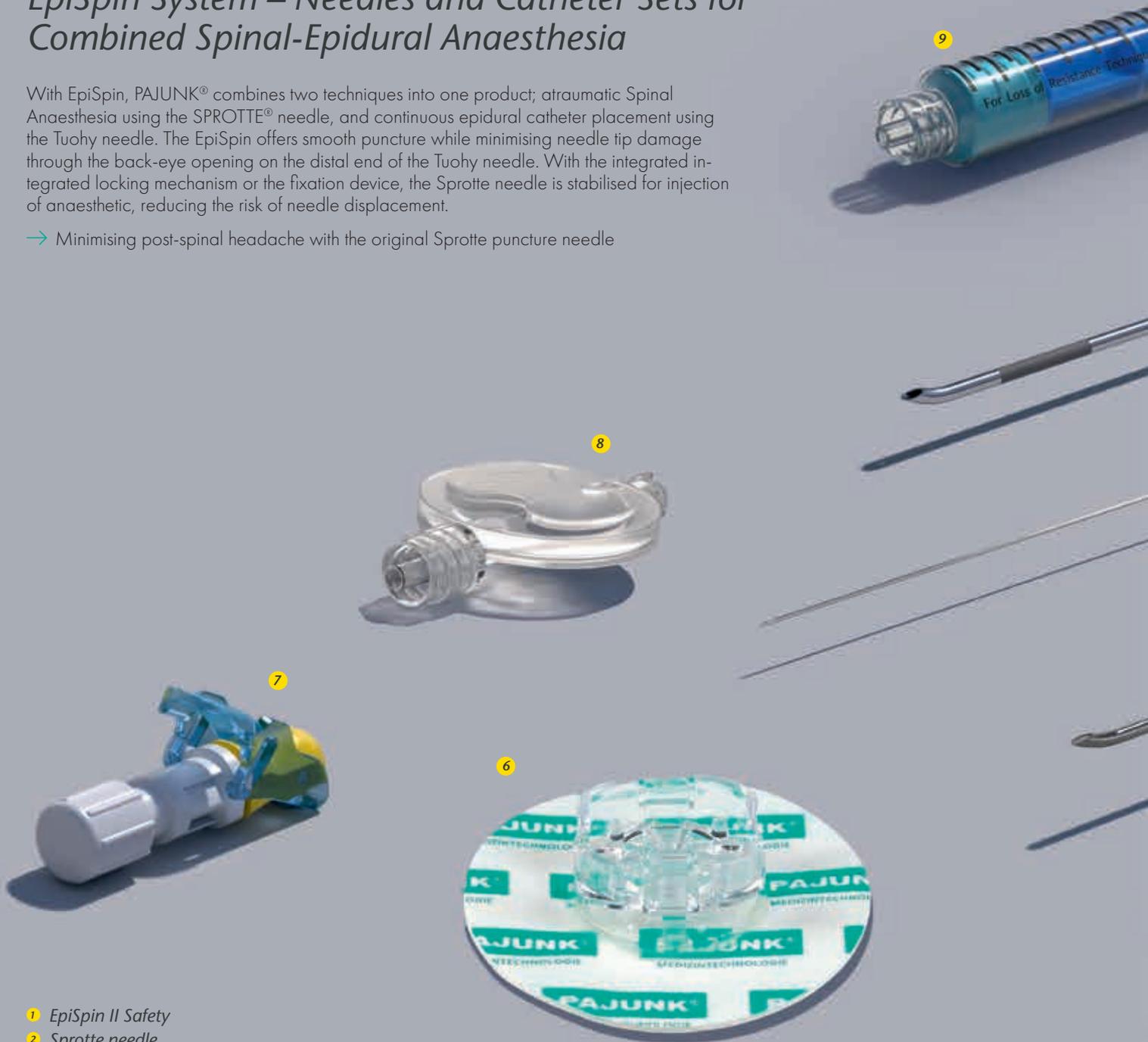
PAJUNK®

Combined Spinal-Epidural Anaesthesia

EpiSpin System – Needles and Catheter Sets for Combined Spinal-Epidural Anaesthesia

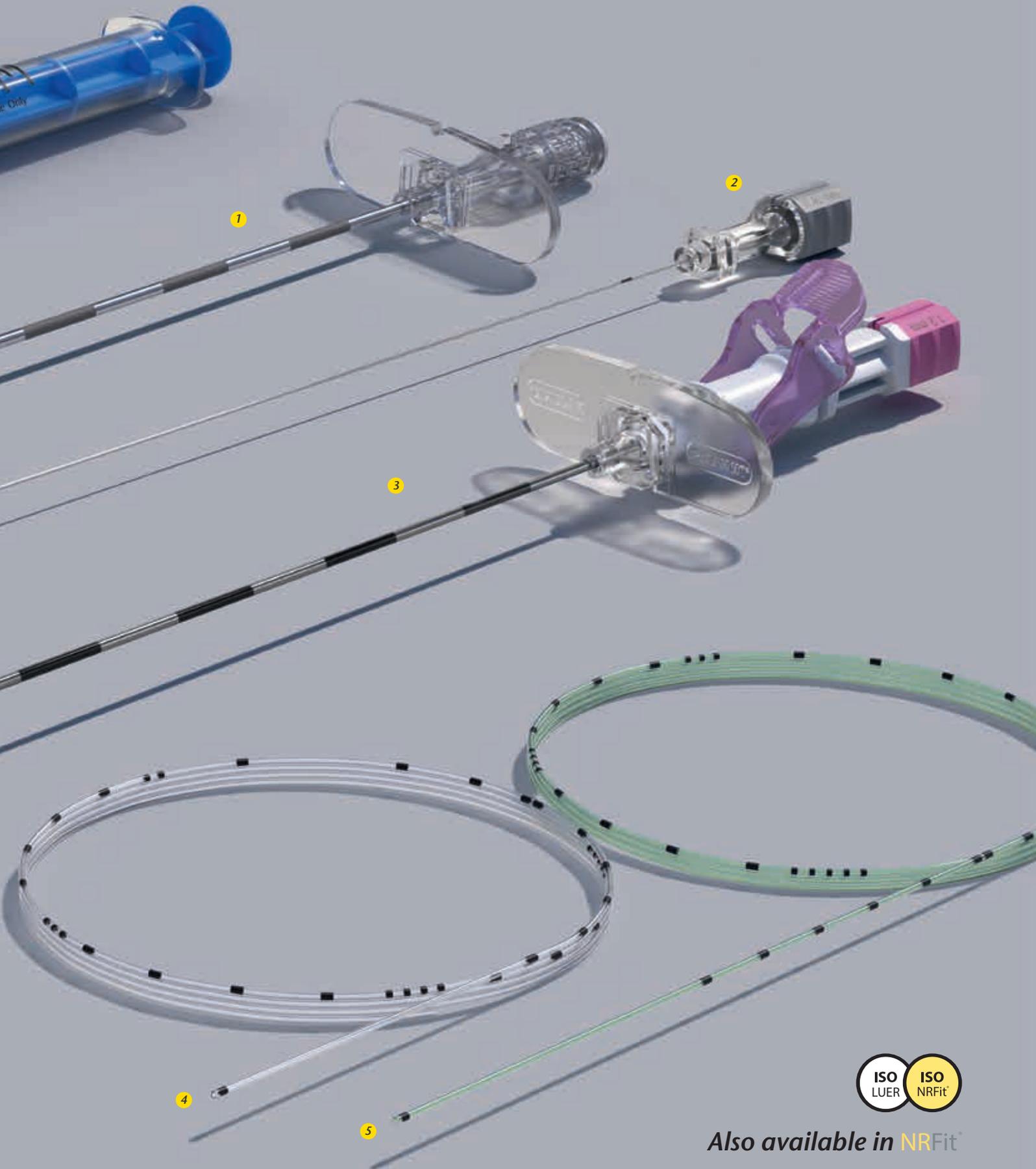
With EpiSpin, PAJUNK® combines two techniques into one product; atraumatic Spinal Anaesthesia using the SPROTTE® needle, and continuous epidural catheter placement using the Tuohy needle. The EpiSpin offers smooth puncture while minimising needle tip damage through the back-eye opening on the distal end of the Tuohy needle. With the integrated locking mechanism or the fixation device, the Sprotte needle is stabilised for injection of anaesthetic, reducing the risk of needle displacement.

→ Minimising post-spinal headache with the original Sprotte puncture needle



- 1 EpiSpin II Safety
- 2 Sprotte needle
- 3 EpiSpin Lock
- 4 EpiLong Catheter
- 5 EpiLong Soft Catheter
- 6 FixoLong
- 7 Clamping Adapter
- 8 Filter
- 9 LOR Syringe

3 | COMBINED SPINAL-EPIDURAL ANAESTHESIA



EpiSpin Lock Needles

Tuohy Needle & SPROTTE® Needle



Unique Locking System

- Easily fixate the Sprotte needle in desired position.
- ▶ Allows for single-handed locking of the Sprotte needle
 - ▶ Allows for 360 degree rotation of the Sprotte needle for optimal needle eye positioning
 - ▶ Stepless fixation mechanism



Back-Eye Opening

- Additional distal opening in the Tuohy tip geometry for optimal positioning of the Sprotte needle.
- ▶ No bending of Spinal needle over Tuohy tip to minimise the chance of needle tip damage.
 - ▶ Designed only for Sprotte needle to pass, not the Epidural catheter.
 - ▶ Spinal puncture needle extends maximum 14 mm.



Atraumatic Tip Design

- The ogive shaped tip significantly reduces the risk of PDPH and the rounded edges of the lateral eye minimise trauma to the dura mater.
- ▶ Minimises chance of PDPH^{1,2}
 - ▶ Consistent tactile feedback



Magnifying Hub

- ▶ Clear, magnifying needle hub allows for easy visualisation of blood or CSF and easier detection of CSF flashback



Outlet Marking

- Marking on the Sprotte needle shaft indicates the exit of the needle tip through the back-eye opening.
- ▶ Simplifies positioning of the Sprotte needle



Precision-Ground Metal Stylet

- ▶ Flush ends of metal stylet and needle reduce the risk of tissue displacement
- ▶ Increased needle stability

EpiSpin Lock Needle

Tuohy	Sprotte	Item no.	PU
18G x 90mm (3 1/2")	27G	0011351-30	10
18G x 90mm (3 1/2")	25G	001351-18	10

EpiLong Catheters

EpiLong Standard – Epidural Injection Catheters



Catheter Options

- ▶ Transparent material
- ▶ Optional with closed tip and three lateral openings or with central opening



Depth Markings

- ▶ Graduations on the first 30 cm
- ▶ Easy determination of catheter positioning
- ▶ Easy to read and identify

EpiLong Soft – Epidural Injection Catheters



Soft Tip

- ▶ Minimises the risk of accidental injury to the blood vessels and dura
- ▶ Closed tip and six lateral openings



Stainless Steel Helical Coil

- ▶ Improved catheter flexibility and stability resulting in reduced chance of kinking⁷
- ▶ Radiopaque



Depth Markings

- ▶ Graduations on the first 30 cm
- ▶ Easy determination of catheter positioning
- ▶ Easy to read and identify

EpiLong Catheter

EpiLong Cath	Tip	Lateral openings	Item no.	NRFit® Item no.	PU	Steel mandrin	Stainless steel helical coil	Adapter
20G x 90 cm (35")	closed	3	001151-37C		10	●		●
20G x 90 cm (35")	closed	3	021151-37C	021163-37C	10			●
20G x 90 cm (35")	open		011151-37C		10	●		●
19G x 90 cm (35")	closed	3	001151-37A		10	●		●
19G x 90 cm (35")	closed	3	021151-37A	021163-37A	10			●
19G x 90 cm (35")	open		031151-37A		10			●

EpiLong Soft Cath	Tip	Lateral openings	Item no.	NRFit Item no.	PU	Steel mandrin	Stainless steel helical coil	Adapter
20G x 90 cm (35")	closed	6	041151-37R	041163-37R	10		●	●
19G x 90 cm (35")	closed	6	041151-37P		10	●		●

EpiSpin II Safety Sets

Tuohy with BackEye, EpiLong Standard catheter with closed tip and three lateral openings, Fixation Device



Fixation Device

- ▶ Ensures a fixed connection between the needle and the indwelling catheter
- ▶ Allows for 360° rotation of the Sprotte needle for optimal needle eye positioning

EpiSpin II Safety Sets

Tuohy	EpiLong catheter	SPROTTE®	Item no.	NRFit® Item no.	PU	Filter	Clamping Adapter	LOR Syringe
18G x 90mm (3 1/2")	20G x 90cm (35")	27G		1022461-30	10	●	●	●
18G x 90mm (3 1/2")	20G x 90cm (35")	25G		1022461-18	10	●	●	●

EpiSpin Lock Soft Sets

Tuohy with BackEye, EpiLong Soft catheter with with stainless steel helical coil, closed tip and six lateral openings, Unique Locking System



Unique Locking System

Easily fixate the Sprotte needle in desired position.

- ▶ Allows for single-handed locking of the Sprotte needle
- ▶ Allows for 360 degree rotation of the Sprotte needle for optimal needle eye positioning
- ▶ Stepless fixation mechanism

EpiSpin Lock Soft Set

Tuohy	EpiLong catheter	Sprotte	Item no.	NRFit Item no.	PU	Filter	Clamping Adapter	LOR Syringe
18G x 90mm (3 1/2")	20G x 90cm (35")	27G	0021352-30		10	●	●	●
18G x 90mm (3 1/2")	20G x 90cm (35")	25G	0021352-18		10	●	●	●

EpiSpin Lock Sets

Tuohy with BackEye, EpiLong Standard catheter with closed tip and six lateral openings, Unique Locking System



Unique Locking System

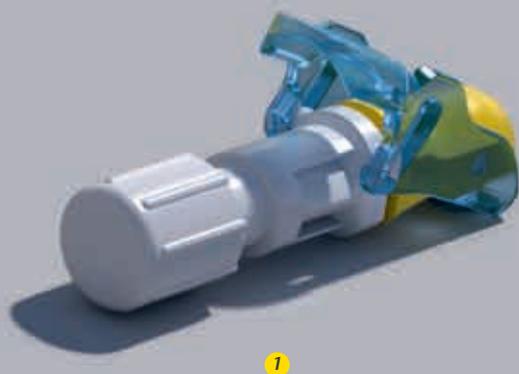
Easily fixate the Sprotte needle in desired position.

- ▶ Allows for single-handed locking of the Sprotte needle
- ▶ Allows for 360 degree rotation of the Sprotte needle for optimal needle eye positioning
- ▶ Stepless fixation mechanism

EpiSpin Lock Set

Tuohy	EpiLong catheter	Sprotte	Item no.	NRFit Item no.	PU	FixoLong	Filter	Clamping Adapter	LOR Syringe
18G x 90mm (3 1/2")	20G x 90cm (35")	27G	0001351-30		10		●	●	
18G x 90mm (3 1/2")	20G x 90cm (35")	27G	0021351-30		10		●	●	●
18G x 90mm (3 1/2")	20G x 90cm (35")	27G	0021351-30M		10	●	●	●	●
18G x 90mm (3 1/2")	20G x 90cm (35")	25G	0021351-18		10		●	●	●
18G x 90mm (3 1/2")	20G x 90cm (35")	25G	0001351-18		10		●	●	
18G x 135mm (5 3/8")	20G x 90cm (35")	25G	0121351-18		10		●	●	●
16G x 90mm (3 1/2")	19G x 90cm (35")	25G	0021351-17		10	●	●	●	●

Accessories



1



2



3

- 1 Clamping Adapter
- 2 LOR Syringe
- 3 FixoLong
- 4 EpiLong VPC
- 5 FixoCath
- 6 MiniFilter
- 7 Filter



4



6

5



7



Also available in **NRFit**

EpiLong VPC

Visual Pressure Control Device for Identification of the Epidural Space



- ▶ Visual indication of Loss of Resistance
- ▶ Dependable position control of the needle tip in epidural space
- ▶ Allows for two-handed needle placement
- ▶ Minimal amount of saline injected into the epidural space

EpiLong VPC

Description	Item no.	NRFit® Item no.	PU
EpiLong VPC 10ml, Lock	0001151-49	0001163-49	10

LOR Syringe

Loss of Resistance Syringe for Identification of the Epidural Space



- ▶ Indication of Loss of Resistance
- ▶ Identification of "False Epidural Space"
- ▶ Smooth plunger gliding

LOR Syringe

Description	Item no.	NRFit Item no.	PU
LOR Syringe, Lock	0001151-65		10
LOR Syringe, Slip		0001166-65	10

FixoCath

Catheter Fixation Device



- ▶ Easy and quick application
- ▶ Skin friendly
- ▶ Universally usable due to small size
- ▶ Catheter fixation near the catheter outlet
- ▶ Ensures maximum freedom of movement for the patient

Catheter Fixation Device

Description	Item no.	PU
FixoCath	001151-37Z	10

Clamping Adapter

Catheter Connector



- ▶ Ensures the best possible flow
- ▶ Strong fixation

Clamping Adapter

Description	Item no.	NRFit Item no.	PU
yellow for 21G / 23G	001151-37V	001163-37V	10
white for 19G / 20G	001151-38C	001163-38C	10
green for 25G / 27G	001151-37Y		10

Filter 0.2µm and FixoLong

Bacterial Filter & Filter Fixation Device



- ▶ Filter fixation near the catheter outlet
- ▶ Ensures maximum freedom of movement for the patient

Bacterial Filter & Filter Fixation Device

Description	Item no. (Filter)	Item no. (MiniFilter)	NRFit Item no.	PU
Filter 0.2µm	001151-37Q	001151-38K	001163-37X	10
FixoLong	001151-47	001151-43	001163-40	10
FixoLong with Filter	001151-48	001151-44	001163-41	10

NRFit Accessories

NRFit Accessories

Description	NRFit Item no.	PU
Filter Needle 18G x 50mm (2")	15291050	10
Locking Cap, male, yellow	15111001	10
Locking Cap, female, yellow	15041001	10

Blood Patch Set

Blood Patch Set

Description	NRFit Item no.	PU
Blood Patch Set Tuohy needle NRFit 18G x 90 mm (3 1/2") with metall stylet / injection needle 60 cm (2 1/4") / 2 syringe 20 ml NRFit Slip / syringe 5 ml Luer Slip / LOR syringe 7 ml NRFit Slip / injection needle 21G x 38 mm (1 1/2") green / injection needle 25G x 25 mm (1") orange / filter needle 18G x 50 mm (2") / filter needle NRFit 18G x 50 mm (2") / two-way stopcock / cotton swab tweezers / 6 round swabs / 4 compress / fenestrated drape / surgical drape	001166-942	5

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