

PAJUNK®

SonoSystem

*The complete system for ultrasound
guided nerve blocks*



Regional anaesthesia

Efficient and effective

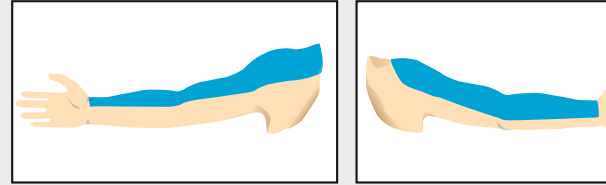
Peripheral nerve blocks

Regional anaesthesia has become an integral part of daily surgical practice. Aside of the single shot techniques for the peripheral blocks during operational interventions, the continuous techniques additionally help to alleviate post operative pain, to improve the operative result and to enhance patient comfort.

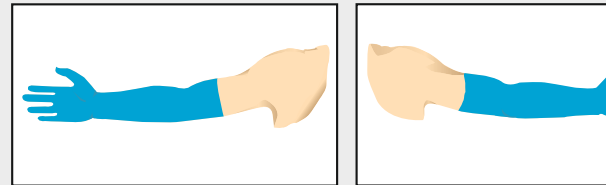
By providing a **comprehensive programme for single shot and for continuous plexus anaesthesia**, PAJUNK® supports the following applications with its catheter puncture kits:

Peripheral blocks

➔ Upper extremities (brachial plexus)

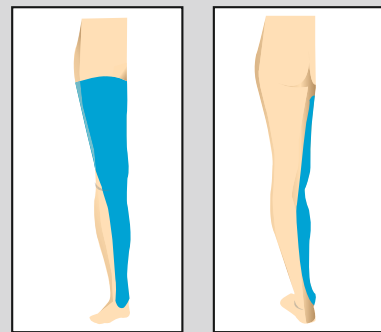


Interscalene brachial plexus block

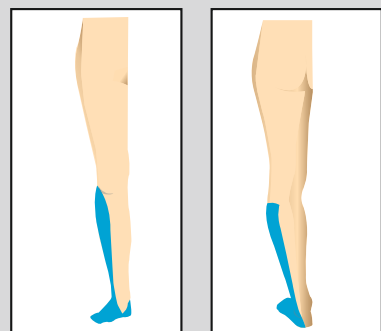


Axillary brachial plexus block

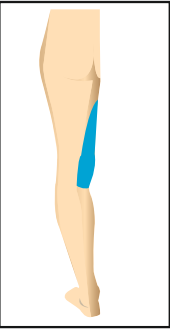
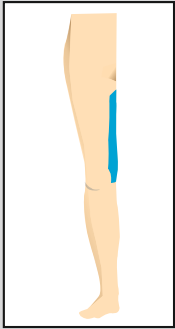
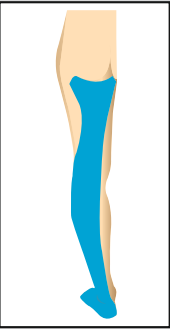
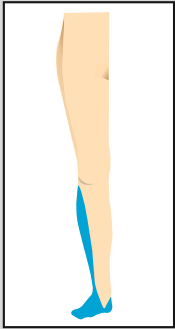
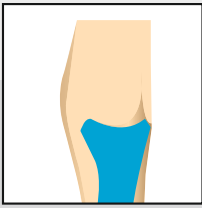
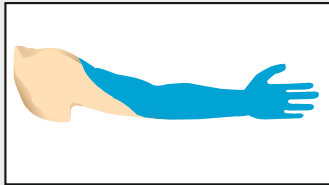
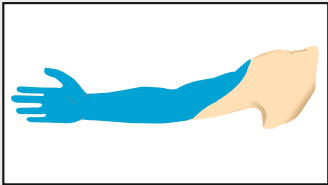
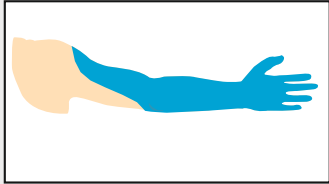
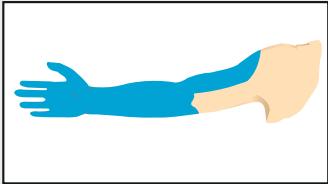
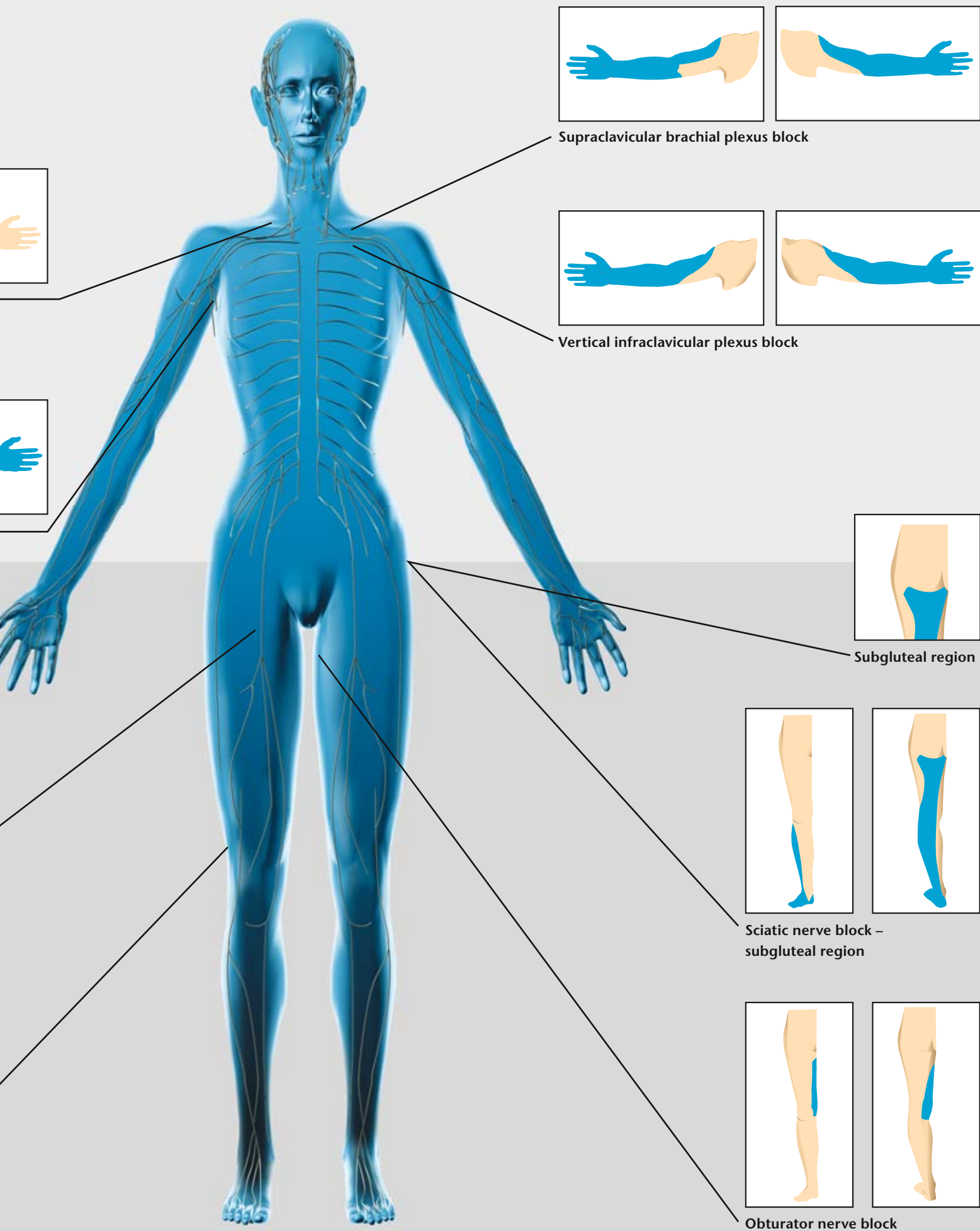
➔ Lower extremities (lumbosacral plexus)



Femoral nerve block



Sciatic nerve block



Supraclavicular brachial plexus block

Vertical infraclavicular plexus block

Subgluteal region

Sciatic nerve block – subgluteal region

Obturator nerve block

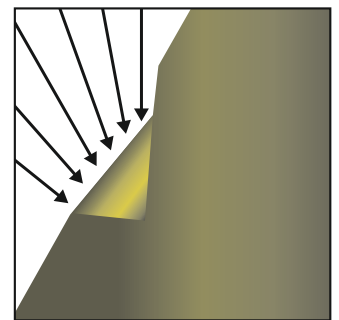
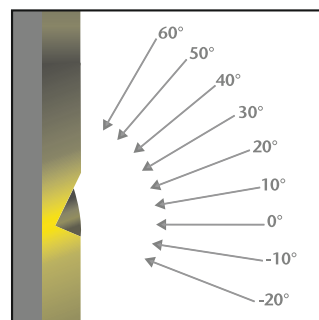
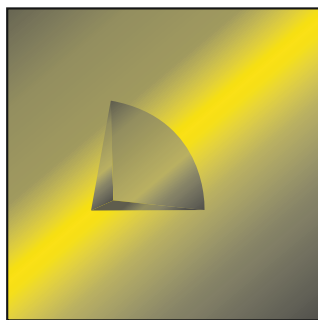
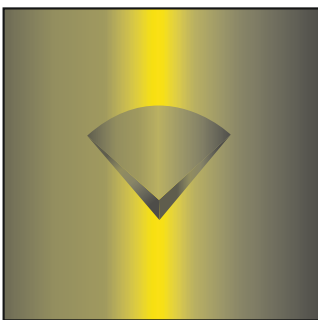
SonoPlex cannula

The system for more visibility and safety under ultrasound monitoring

The method of ultrasound monitoring is increasingly gaining importance in regional anaesthesia. Today even the finest anatomical structures including peripheral nerves can be identified in detail and anaesthetised selectively under viewing using modern high-resolution ultrasound scanners. This method supports the traditional procedure by means of nerve stimulation.

But daily practice has shown, that it is not at all that easy to identify the cannula tip definitely and clearly on the viewing screen of the ultrasonic device. Before this background, PAJUNK® has developed the "Cornerstone" reflectors in cooperation with Dr Chris Mitchell and has thereby launched a new cannula generation, with a 100%-reflection-guarantee under ultrasound monitoring.

Ultrasound marker with 100 % reflection guarantee



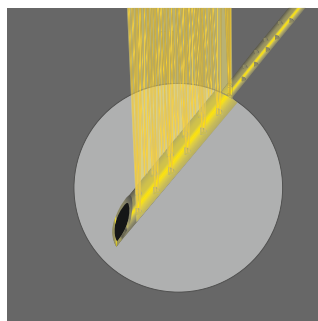
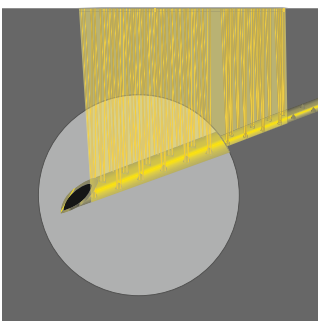
The "Cornerstone" reflectors developed by Dr Chris Mitchell are structured so that all ultrasound waves are reflected without losses.

➡ This provides optimal visibility of the cannula tip and it can be identified with absolute certainty.

10 mm



Visibility – regardless of the puncture angle



The nature of the "Cornerstone" reflectors renders optimal reflection properties.

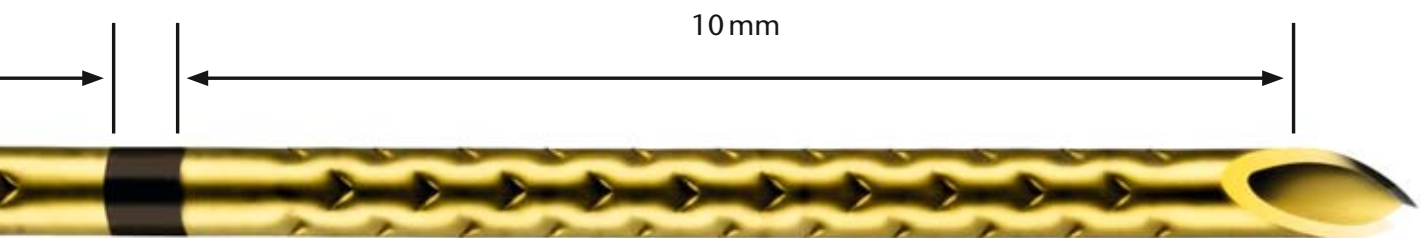
➡ The reflective behaviour at this optimal performance level is warranted at steep puncture angles, and at flat puncture angle as well.

Perfect gliding qualities and coating



The cannula are coated using the innovative NanoLine-technology.

➡ This guarantees for perfect gliding qualities, it increases visibility under ultrasound-monitoring, and it permits the precise stimulation through the tip.

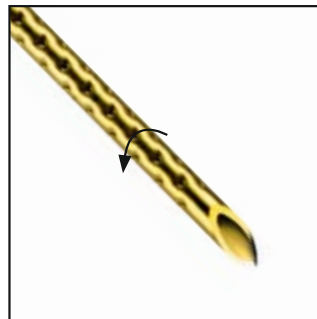


Clear identification



The distal end is supplied with two pattern-embossed sections, both 10 mm long.

➡ So the reflection of the ultrasonic waves occurs along a total length of 20 mm.



The cannula segments have respectively been provided with a circumferential array of "Cornerstone" reflectors arranged in 60°-angles.

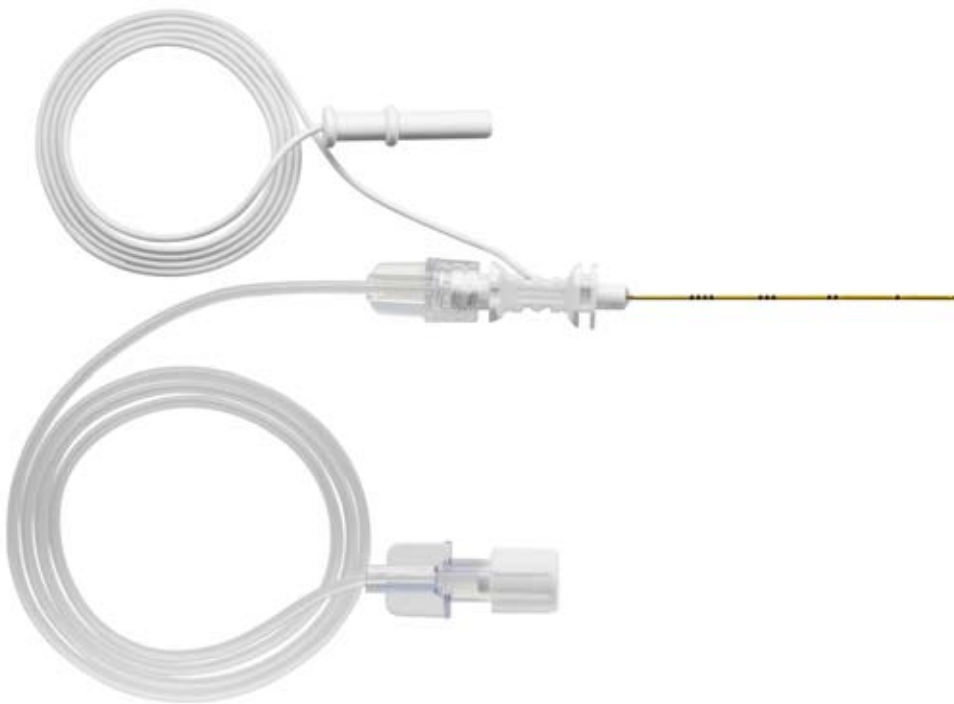
➡ The perfect identification of the cannula is therefore ensured in every position.

SonoPlex cannula

Single shot peripheral nerve block anaesthesia under ultrasonic monitoring

The SonoPlex cannula were developed by PAJUNK® especially for the single shot application, to be used in peripheral nerve block anaesthesia.

SonoPlex cannula with NanoLine coating and with connector cable for stimulation

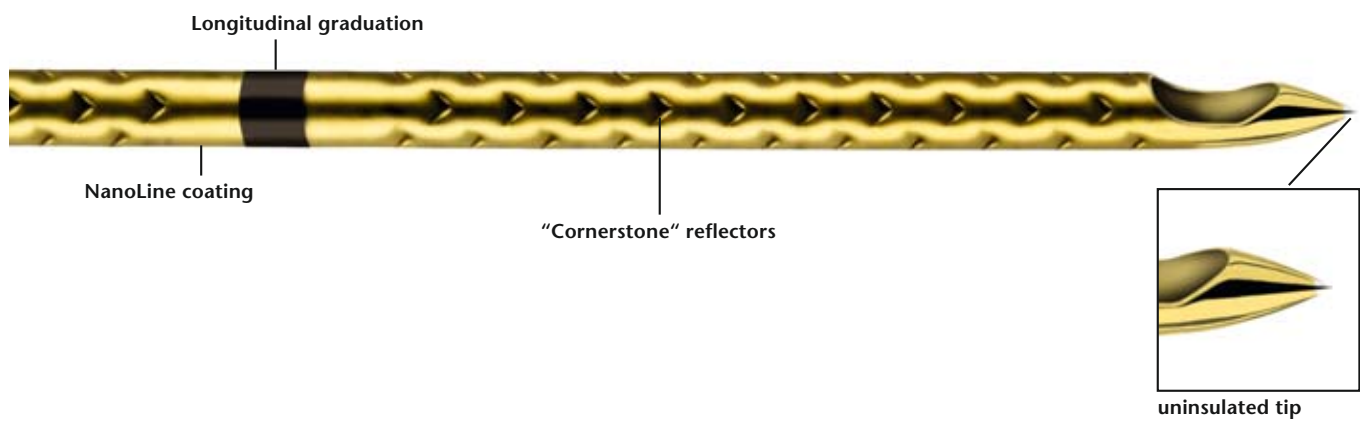


The combination of ultrasound and stimulation provides the user with the benefit of double safety. It can be removed by the anaesthetist at any time, if it gets in the way during work. The combination of ultrasound and stimulation provides the user with the benefit of double safety.

There are two different tip geometries available for the user to choose from:

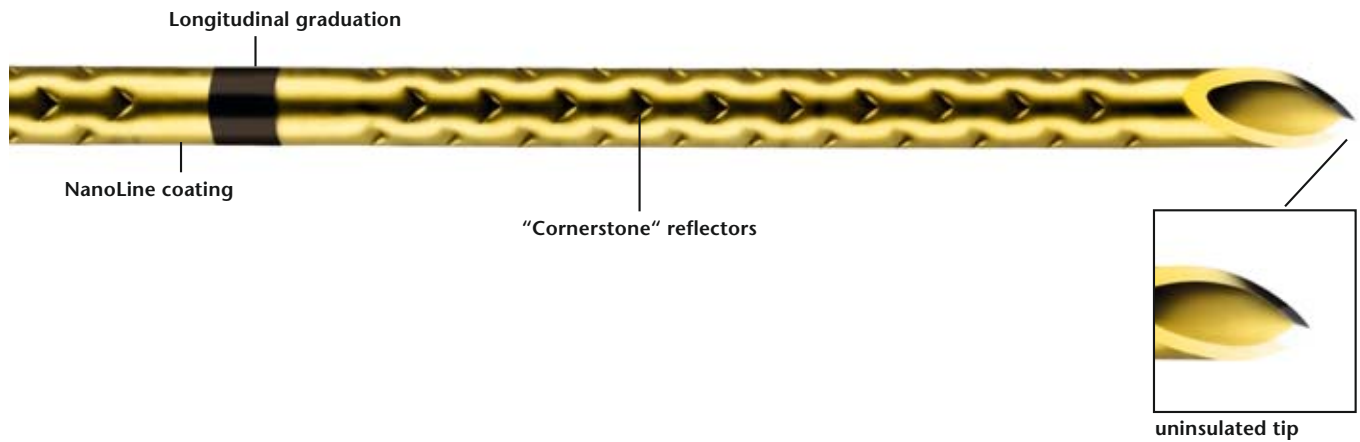
The SonoPlex cannula with SPROTTE® tip

The closed tip of this cannula assists the anaesthetist in the atraumatically precise localization of the nerve.



The SonoPlex cannula with facet tip

In comparison with conventional sharp cannulas, this special facet tip reduces the risk of injury to a minimum, and it ensures for an excellent quality of the puncture.



SonoLong kit

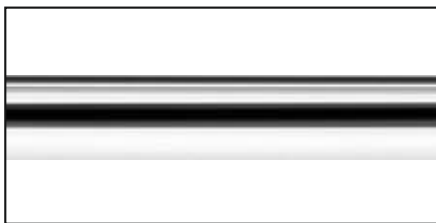
For continuous peripheral nerve block anaesthesia under ultrasonic monitoring

With the PlexoLong NanoLine kit according to Meier, PAJUNK® has, as the first and the only manufacturer, initiated a system, by which the catheter is introduced in sterile condition directly from a container through the cannula, and the anaesthetic is injected through the catheter. This patented technique has established itself successfully on the market and has aroused a great response and recognition in the professional world.

Now, in the next evolutionary step, the cannula of the PlexoLong kit are equipped with "Cornerstone" reflectors. This SonoLong kit is excellently suitable for the performance of the continuous techniques under ultrasonic monitoring.

The kit consists of:

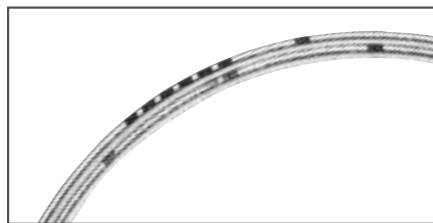
- SonoLong cannula with "Cornerstone" reflectors – optionally available with SPROTTE®-SPECIAL cannula, Tuohy cannula or cannula with facet tip
- Catheter in the catheter cassette
- FixoLong system
- Colour coded adapter



Steel stylet

The catheter of the SonoLong kit has been provided with a steel stylet, which is locked in place in the introductory aid at its end, and is removed together with the container after the application of the catheter.

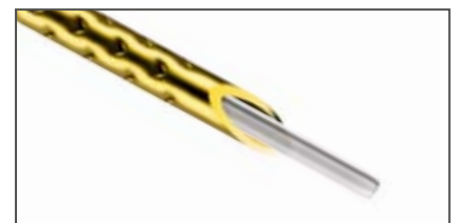
➡ This provides the catheter with the optimal stiffness.



Ascending length indication

The catheter with a length of 50 cm has been provided with an ascending length indication up to a length of 30 cm in intervals of 5 cm.

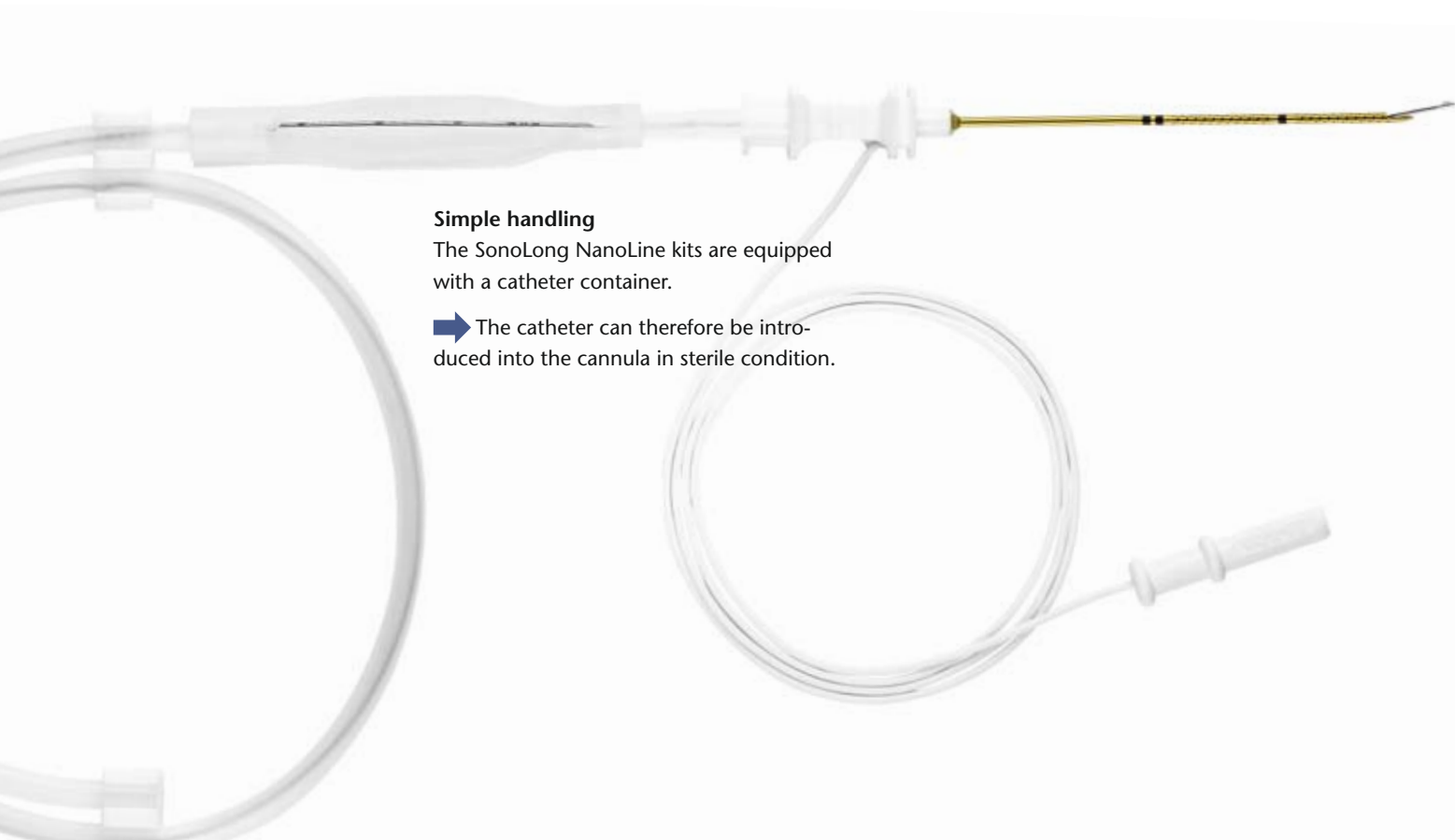
➡ Its position can therefore be determined exactly at any time.



Catheter with central orifice

The centre of the radiopaque catheter is open.

➡ This ensures the free flow of the anaesthetic – particularly in connection with the post-operative injection pump.



Simple handling

The SonoLong NanoLine kits are equipped with a catheter container.

➡ The catheter can therefore be introduced into the cannula in sterile condition.

There are three cannula types available to choose from

The SonoLong kit is alternatively fitted with three different cannula types. While the facet tip cannula exclusively places the catheter parallel to the nerve, the SPROTTE®-SPECIAL cannula and the Tuohy cannula are suitable for those cases, where it is necessary to introduce the catheter at an angle to the nerve.



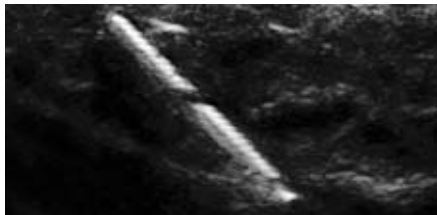
Cannula with facet tip



Tuohy cannula



SPROTTE®-SPECIAL cannula



Clear and definite identification

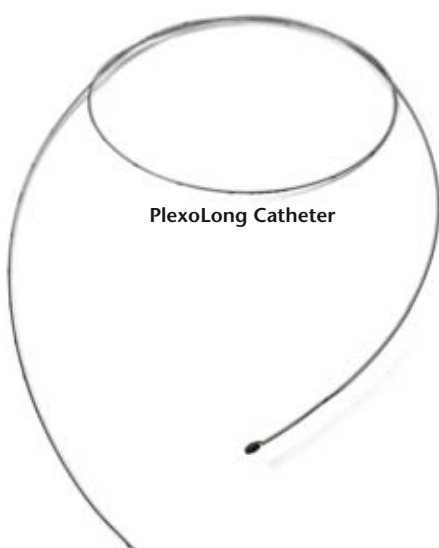
The cannula are equipped with two pattern-embossed sections, each having a length of 10 mm, which have been provided with "Cornerstone" reflectors.

➡ This guarantees an optimal reflection of the ultrasonic waves along a total length of 20 mm.

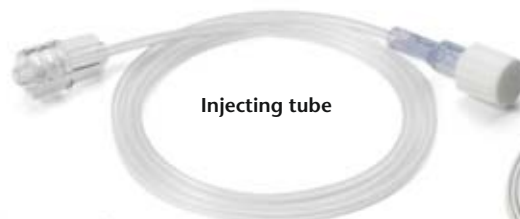
Perfect gliding qualities

The SonoLong cannula are coated using the innovative NanoLine-technology.

➡ This ensures for perfect gliding qualities, it increases visibility under ultrasound-monitoring, and it permits precise stimulation through the uninsulated tip.



PlexoLong Catheter



Injecting tube



FixoLong



Filter



SonoLong NanoLine cannula



Clamping adapter

SonoLong Sono catheter kit according to Meier

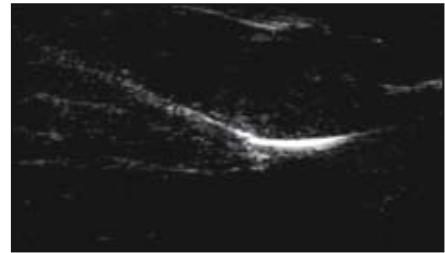
The kink- and crease-proof catheter with a stainless steel helical coil

The SonoLong Sono catheter kit according to Meier is different from the SonoLong kit only and solely through the design of the catheter. It is equipped with an integrated stainless steel helical coil, and it is particularly suitable for long-term treatment in pain therapy and plexus anaesthesia. The SonoLong Sono kit is, just as the SonoLong kit, available with three different types of cannulas: With a SPROTTE® SPECIAL cannula, with a facet tip cannula or with a Tuohy cannula. All three cannula variants are equipped with the approved "Cornerstone" reflectors for maximum visibility under ultrasound monitoring.

Graduation and radiographic contrast strips

The SonoLong Sono catheter is graduated along the first 30 cm, and it has also been provided with radiographic contrast strips.

➡ This permits the perfect identification of the catheter, as well as its precise, on-target placement.



There are three cannula types available to choose from

The SonoLong Sono kit is alternatively fitted with three different cannula types: While the facet tip cannula is exclusively placed parallel to the nerve, the SPROTTE®-SPECIAL cannula and the

Tuohy cannula are suitable for those cases, where it is necessary to introduce the catheter at an angle to the nerve.



Cannula with facet tip



SPROTTE®-SPECIAL cannula

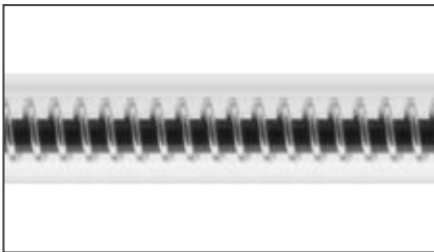


Tuohy cannula

Great inner lumen and integrated stainless steel helical coil

The SonoLong Sono catheter has a particularly large inner lumen. The integrated stainless steel helical coil makes it absolutely crease- and kink-proof.

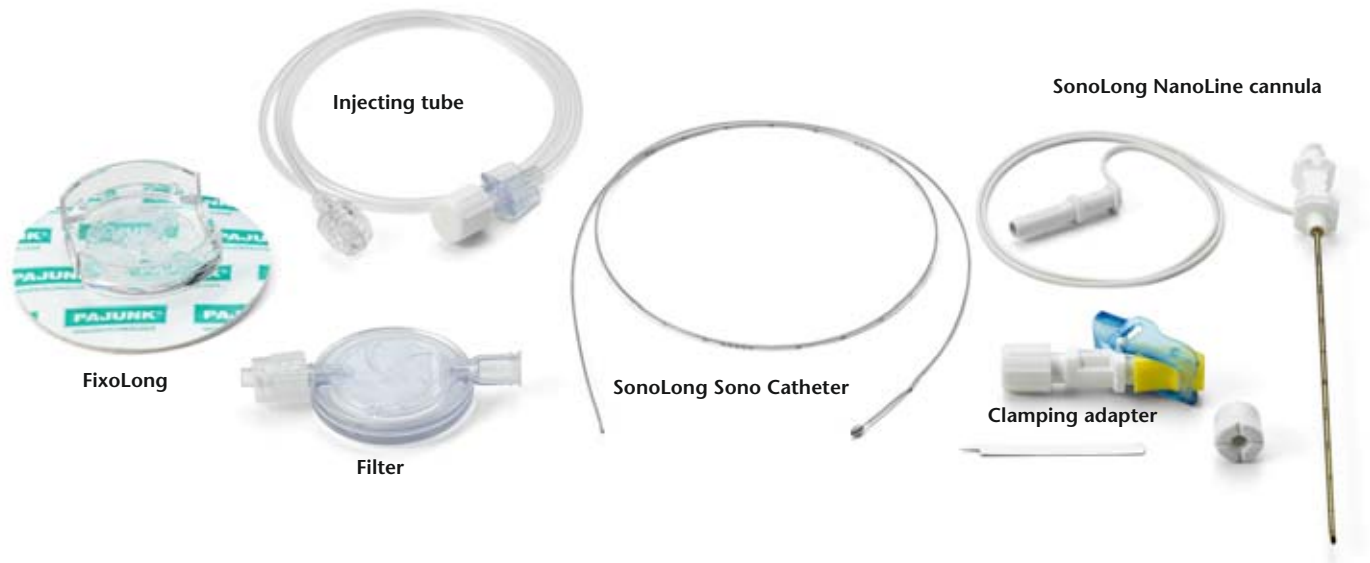
➔ The SonoLong Sono catheter therefore fulfills the prerequisites for a safe connection to the injection pump, in conjunction with an absolutely unhindered flow of the anaesthetic – also and particularly over a longer period of time. An important aspect for continuous applications.



Soft, flexible catheter tip

The steel stylet ends 1 cm before reaching the catheter tip, which leaves the tip soft and flexible.

➔ This helps in avoiding inadvertent injuries of vessels, while providing for maximum flexibility during the introduction and placement of the catheter.



Injecting tube

SonoLong NanoLine cannula

FixoLong

Filter

SonoLong Sono Catheter

Clamping adapter

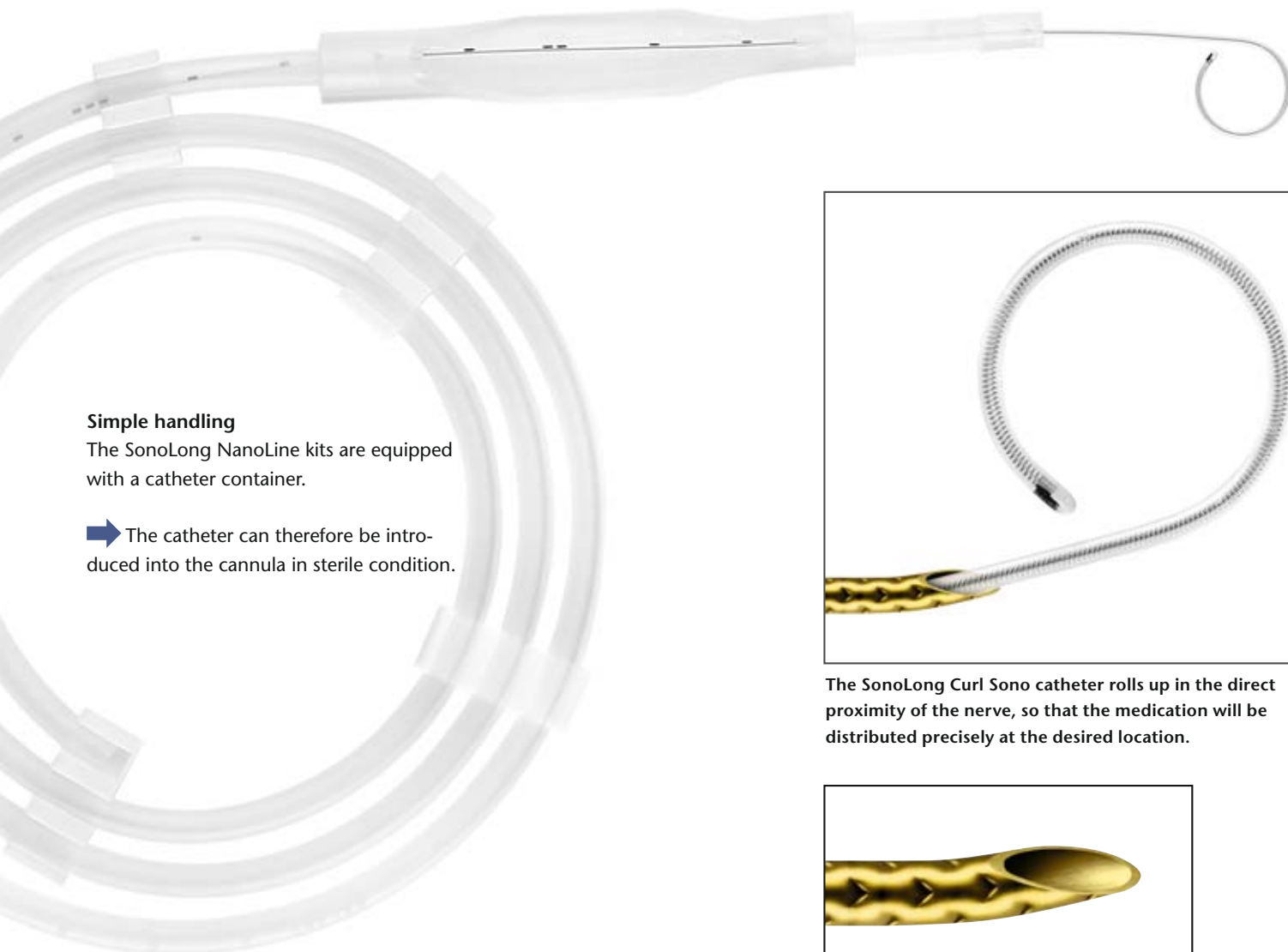
SonoLong Curl Sono kit

The “on-the-dot” anaesthesia, with a minimum of medication required

The SonoLong cannula is positioned precisely in the direct proximity of the nerve, thanks to ultrasound and the support of the “Cornerstone” reflectors. Since the catheter will follow the path with the least resistance, and this does not always coincide with the neural structures, it is also necessary to monitor the position of the catheter exactly.

With the SonoLong Curl Sono kit, the precise placement of the catheter is also guaranteed. Because the tip of the SonoLong Curl Sono catheter, which PAJUNK® has developed in cooperation with

Dr Cedric Luyet, has been fashioned in a very special manner. As soon as the catheter passes through the opening of the cannula, the adaptable tip of the Curl – catheter will roll up and therefore remain at the point where the cannula tip is positioned. This permits an extremely precise anaesthesia, with a minimum of medication required. The SonoLong Curl Sono kit is available with a cannula provided with a Tuohy tip and equipped with the approved “Cornerstone” reflectors for maximum visibility under ultrasound monitoring.

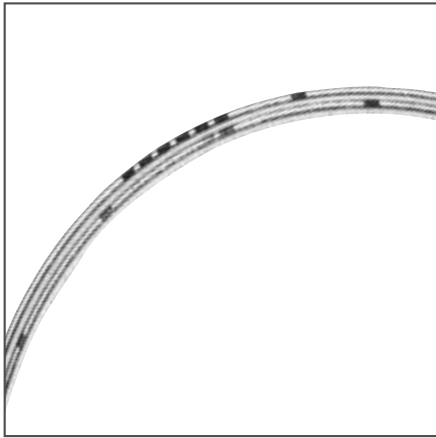


Simple handling

The SonoLong NanoLine kits are equipped with a catheter container.

➡ The catheter can therefore be introduced into the cannula in sterile condition.

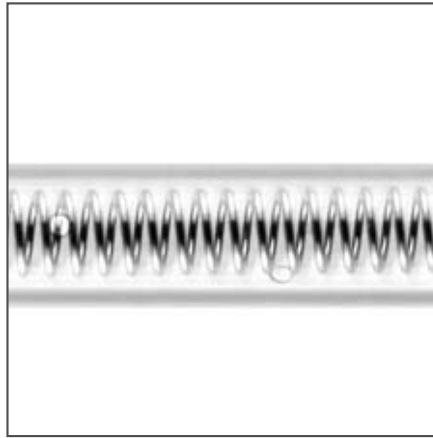
The SonoLong Curl Sono catheter rolls up in the direct proximity of the nerve, so that the medication will be distributed precisely at the desired location.



Ascending length indication

The catheter with a length of 50 cm has been provided with an ascending length indication up to a length of 30 cm in intervals of 5 cm.

➡ Its position can therefore be determined exactly at any time.



Integrated stainless steel helical coil

The catheter is absolutely crease- and buckle-proof, thanks to the integrated stainless steel helical coil.

➡ This ensures the unhindered flow of the anaesthetic, also and particularly over a longer period of time.



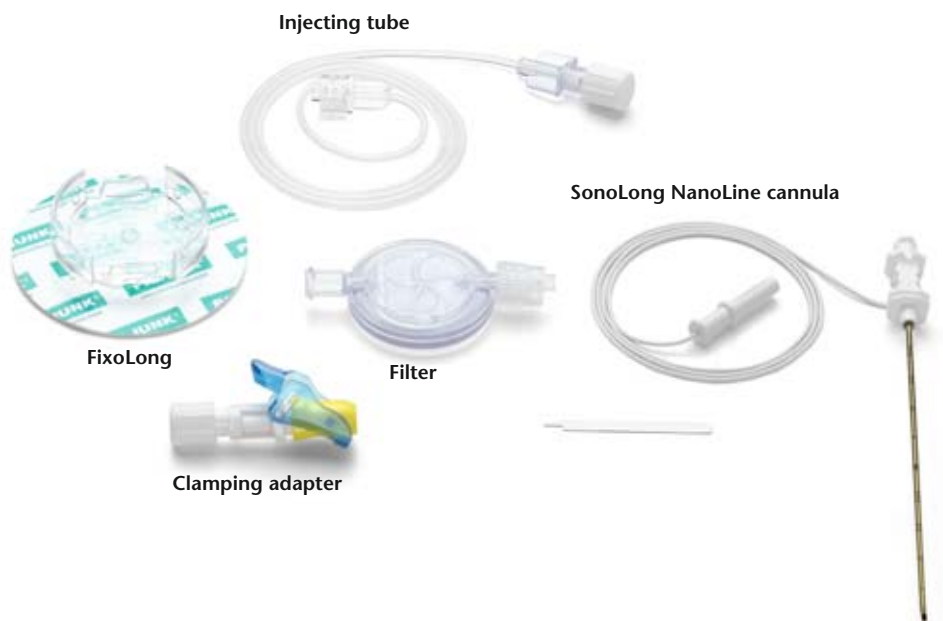
Catheter with curved end, closed tip with 3 lateral eyes

The centre of the radiopaque catheter is closed.

➡ This will guarantee the accurate and precise administration of the anaesthetic, and it ensures the free flow of the anaesthetic – particularly in connection with the post-operative injection pump.



SonoLong Curl Sono



Injecting tube

FixoLong

Filter

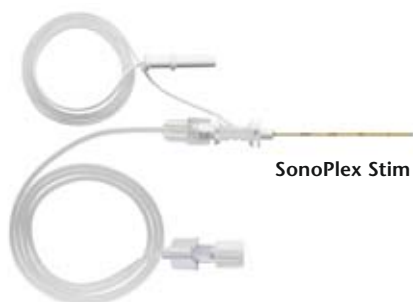
Clamping adapter

SonoLong NanoLine cannula

The complete SonoSystem

All the information at a glance

SonoPlex cannula with facet tip with SPROTTE® tip



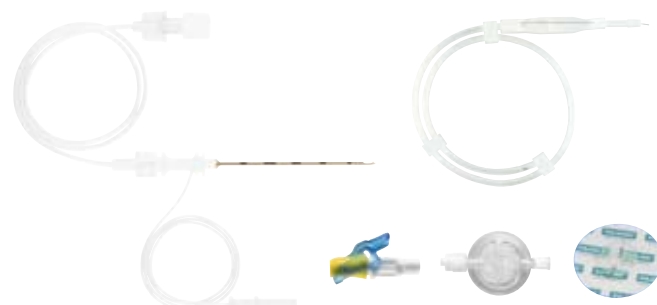
SonoPlex Stim



SonoPlex Stim	Item no.	PU
24 G x 25 mm	001185-75	10
22 G x 40 mm	001185-70	10
22 G x 50 mm	001185-74	10
22 G x 80 mm	001185-71	10
21 G x 100 mm	001185-77	10
20 G x 120 mm	001185-72	10
20 G x 150 mm	001185-76	10

SonoPlex Stim	Item no.	PU
24 G x 40 mm	001185-30G	10
22 G x 50 mm	001185-31G	10
22 G x 70 mm	001185-31H	10
22 G x 90 mm	001185-31J	10

SonoLong NanoLine



- SonoLong NanoLine cannula Luer Lock with electrical connector cable
- Adaptable injection tube
- PlexoLong catheter 20 G x 50 cm with steel stylet and central opening
- Clamping adapter (yellow)
- Filter 0,2µm
- FixoLong



Product	Size	PlexoLong Catheter	Item no.	PU
Facet tip	19 G x 50 mm	20 G x 50 cm	531185-31A	10
	19 G x 100 mm	20 G x 50 cm	521185-31A	10
	19 G x 150 mm	20 G x 50 cm	511185-31A	10
SPROTTE® SPECIAL tip	19 G x 60 mm	20 G x 50 cm	531185-31B	10
	19 G x 120 mm	20 G x 50 cm	521185-31B	10
Tuohy tip	18 G x 50 mm	20 G x 50 cm	531185-31C	10
	18 G x 100 mm	20 G x 50 cm	521185-31C	10



SonoLong Sono kit acc. Meier



- SonoLong NanoLine cannula Luer Lock and electrical connector cable
- Adaptable injecting tube
- SonoLong Sono catheter 20 G with metal helical coil and central opening
- Clamping adapter (yellow)
- Filter 0.2 µm
- FixoLong

Product	Size	SonoLong Sono Catheter	Item no.	PU
SonoLong NanoLine cannula				
Facet tip	19 G x 50 mm	20 G x 50 cm	531187-31A	10
Facet tip	19 G x 100 mm	20 G x 50 cm	521187-31A	10
SPROTTE® SPECIAL tip	19 G x 60 mm	20 G x 50 cm	531187-31B	10
SPROTTE® SPECIAL tip	19 G x 120 mm	20 G x 50 cm	521187-31B	10
Tuohy tip	18 G x 50 mm	20 G x 50 cm	531187-31C	10
Tuohy tip	18 G x 100 mm	20 G x 50 cm	521187-31C	10

SonoLong Curl Sono kit



- SonoLong NanoLine cannula Luer Lock and electrical connector cable
- Adaptable injecting tube
- SonoLong Curl Sono catheter 20 G with metal helical coil, closed tip and 3 lateral eyes
- Clamping adapter (yellow)
- Filter 0.2 µm
- FixoLong

Product	Size	SonoLong Curl Sono Catheter	Item no.	PU
SonoLong NanoLine cannula				
Tuohy tip	18 G x 100 mm	20 G x 90 cm	521188-34C	10

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