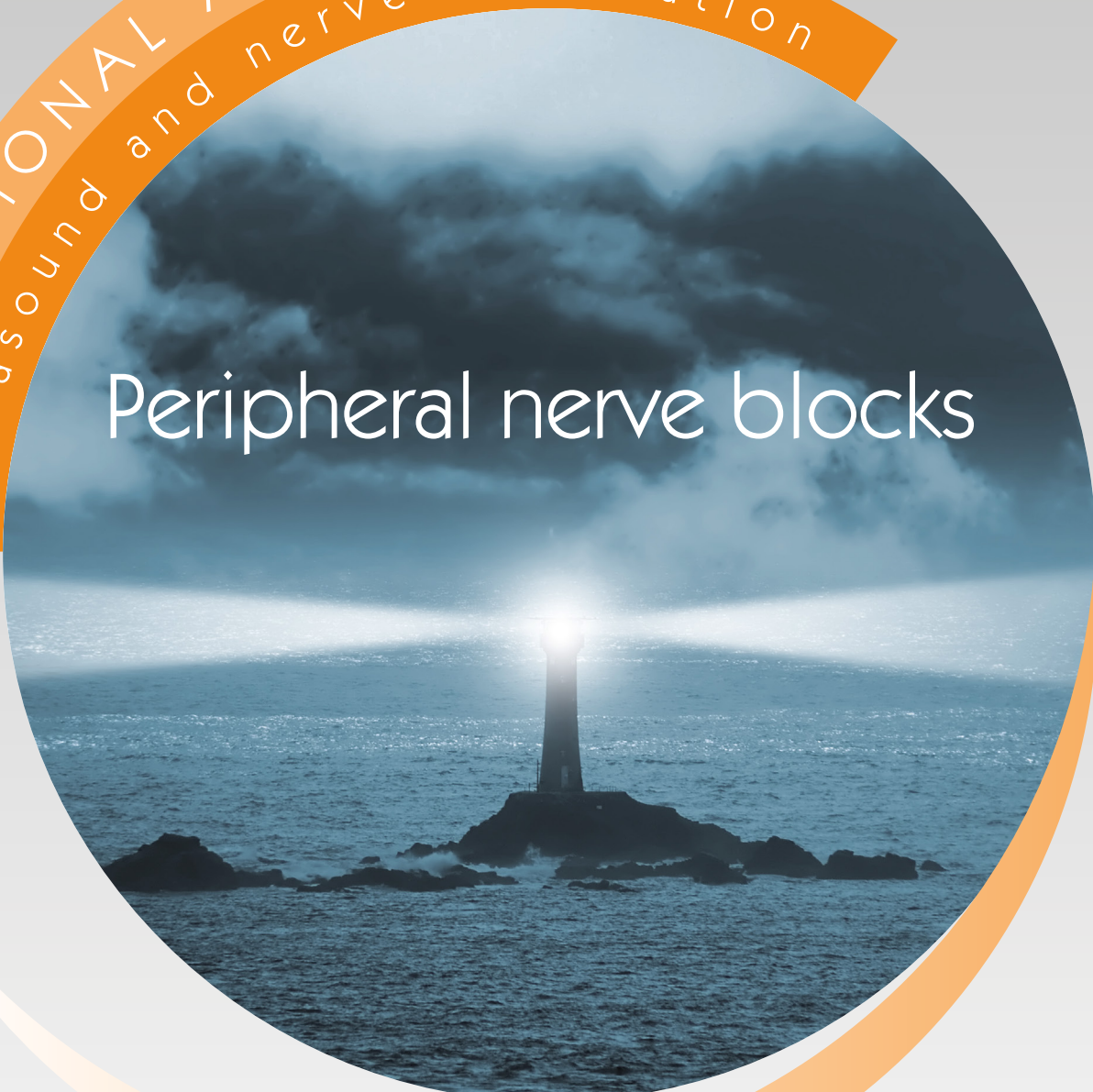




REGIONAL ANAESTHESIA

Ultrasound and nerve stimulation

# Peripheral nerve blocks

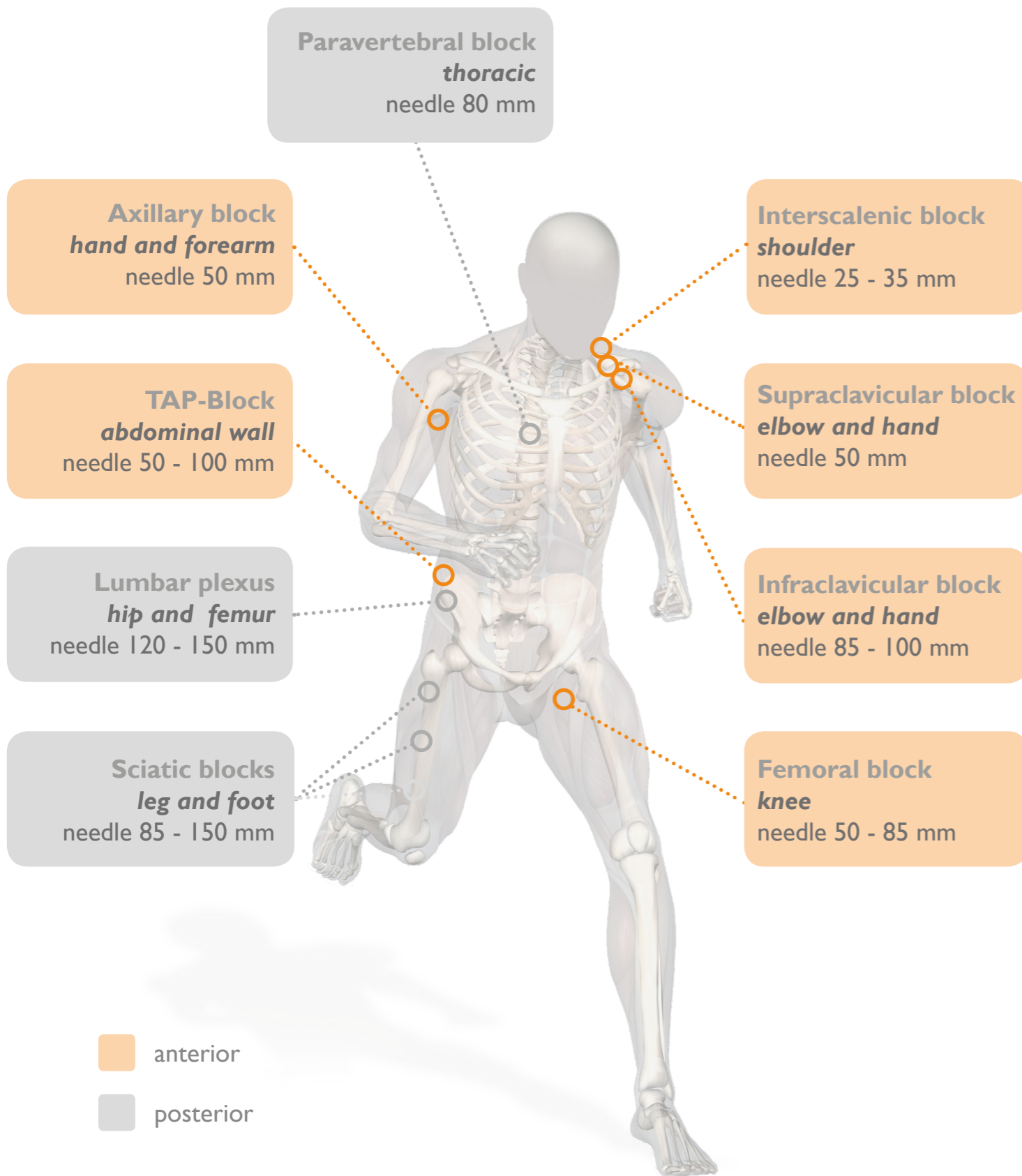


Value Life



- **Vygon supports regional anesthesia specialists in the development of new techniques thanks to :**
  - a range of efficient needles and catheters
  - the creation of customized sets, enabling each customer to standardise its procedures
  - educational tools, training centres and smartphone applications

## Which needle for which block, and surgery?



## VYGON, YOUR PARTNER FOR PERIPHERAL BLOCKS

### CATHETERS & NEEDLES

#### Ultrasound

Echogenic needle <b>visioplex</b> <sup>®</sup> .....	p. 6
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#### Ultrasound combined with nerve stimulation

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#### Nerve stimulation

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### CREATION OF CUSTOMIZED SETS

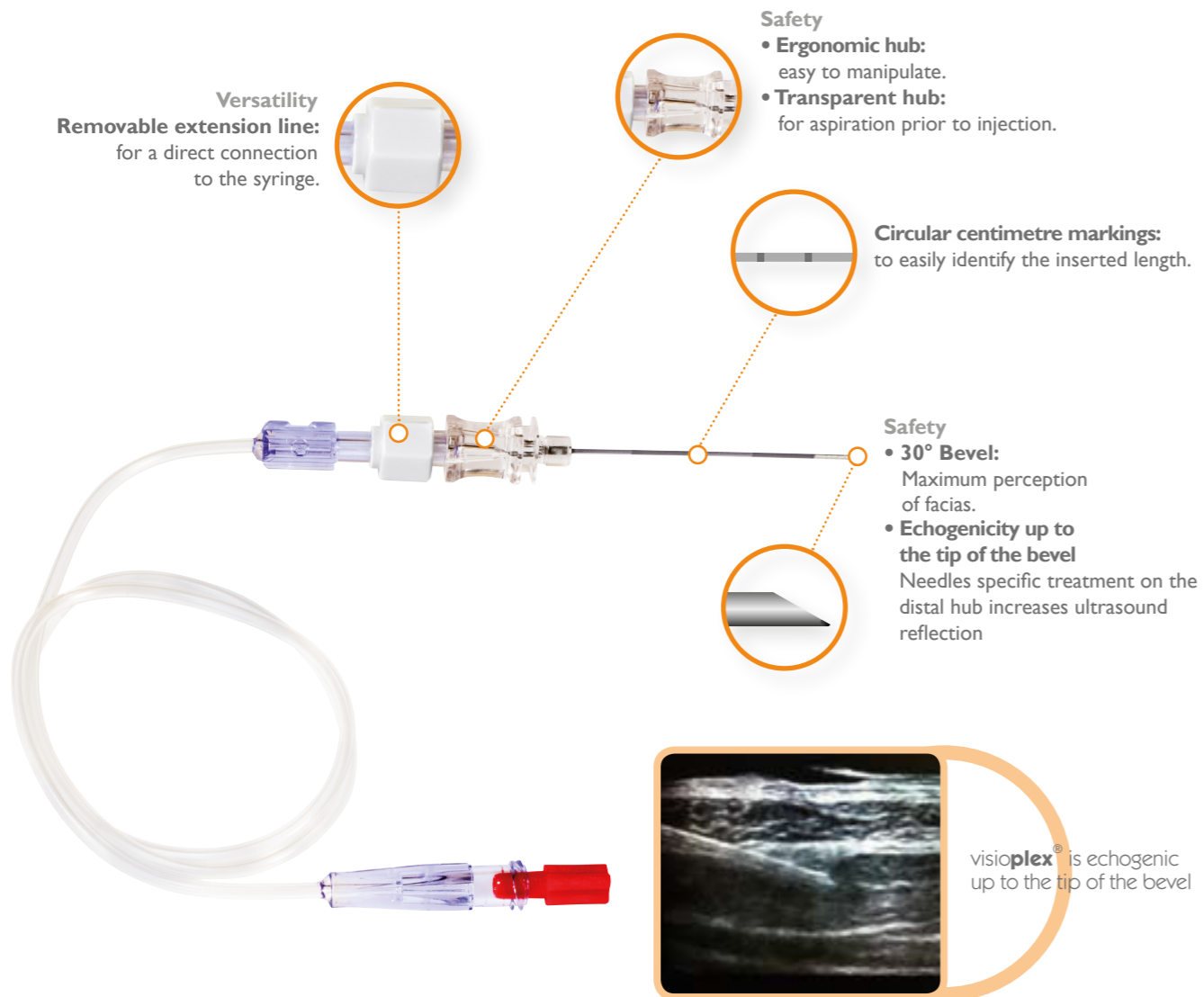
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### EDUCATIONAL TOOLS

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## Echogenic needle Single shot injection

Some procedures, such as a TAP (Transversus Abdominis Plane) block, do not require nerve stimulation, these procedures are performed using ultrasound only. visioplex® meets the requirements of these procedures, and being sand-blasted steel at the tip, the needle is highly echogenic.



2 gauges to fit each practitioner's needs.

Length	Gauge	Code	Packaging (box)	VYSET®
35 mm	22	6094.3534	20 / box	These references are also available in Vyset, with devices dedicated to ultrasound. For more details, see page 13.
50 mm	20	6094.503	20 / box	
50 mm	22	6094.5034	20 / box	
85 mm	22	6094.8534	20 / box	
100 mm	20	6094.103	20 / box	

## Echogenic Tuohy needle Single and/or continuous injection

Developed with Dr **Rafa Blanco** (Abu D'Abi), the rafa **tuohy** needle is sand-blasted to improve the quality of image under ultrasound. It is intended for paravertebral blocks with or without a catheter (5291.3371), or for a TAP block with a catheter.



### VYSET®

rafa **tuohy** is available as a stand alone product, or as a component of a customised set, featuring an extension line, and devices dedicated to ultrasound.

## The epimatic syringe Enables one-handed placement

The paravertebral and/or epidural space is automatically found thanks to an elastic collar applied on the plunger.



## Echogenic and stimulating needle Single shot injection

echoplex+® combines the requirements of both techniques:

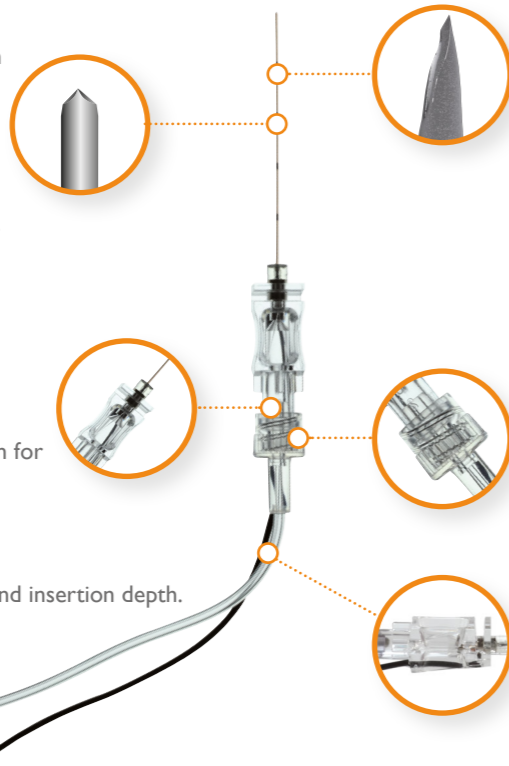
A nerve stimulation needle has been made fully echogenic thanks to a new insulating coating. The needle is fine, the outer surface is smooth and the echogenic coating goes right to the tip. **The new bevel combines easy skin penetration and echogenicity.**

**Comfort for the patient**  
Smooth surface: for easy insertion and to minimise patient trauma.

**Precision**  
**The highly conductive needle** allows precise nerve stimulation using a very low intensity current.

**Practical**  
**Ergonomic hub** for an easy handling.  
**Transparent hub** Allows aspiration before injection for extra safety.

**Circular centimetre marking**  
Gives control of needle position and insertion depth.



**Visibility**  
20° bevel with a specific coating for a maximum echogenicity.

**Perfect visibility**  
the echogenic coating surrounds the entire needle up to the tip.

**Versatility**  
• **Removable extension line**  
Enables connection of a syringe directly to the needle if required.  
• Low dead space (1 ml).

**Safety**  
• A long (60cm) electrical cable to work at distance from sterile field.  
• Quick identification of the bevels direction thanks to the black cable positioning.



### Innovation: a patented coating

The coating uses the hardness of microscopic glass beads which are distributed in an insulating polymer.

The high concentration of glass beads intensifies the ultrasound reflection. The quantity of glass beads has been precisely calculated to maximise reflection whilst minimising artefacts.

Length	Gauge	Code	Packaging (box)
25 mm	23	6194.253	20 / box
35 mm	23	6194.353	20 / box
50 mm	22	6194.503	20 / box
85 mm	21	6194.853	20 / box
100 mm	21	6194.103	20 / box
120 mm	20	6194.123	20 / box
150 mm	20	6194.153	20 / box

### VYSET®

These references are also available in VYSET, with devices dedicated to ultrasound.

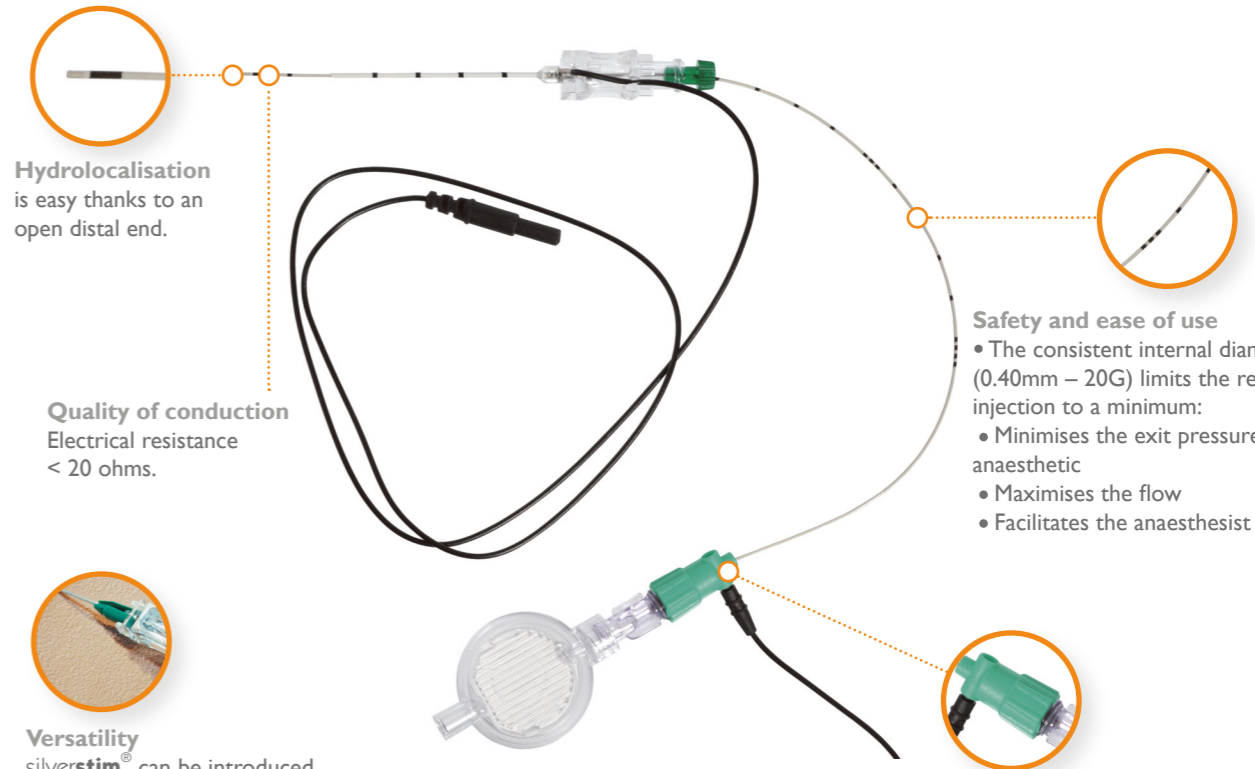
For more details, see 13.



## Echogenic and stimulating catheter Continuous injection

silverstim combines modern techniques to offer the most precise placement of catheter.

Thanks to a new coating method, a thin silver layer is spread on the whole length of the catheter. This ensures optimum conductivity and echogenicity, without reducing the internal diameter.



**Hydrolocalisation**  
is easy thanks to an open distal end.

**Quality of conduction**  
Electrical resistance < 20 ohms.

**Versatility**  
silverstim® can be introduced through a needle or a split cannula.

**Safety and ease of use**

- The consistent internal diameter (0.40mm – 20G) limits the resistance to injection to a minimum:
- Minimises the exit pressure of the anaesthetic
- Maximises the flow
- Facilitates the anaesthetist procedure.

**Special easylock®:**

- can be unscrewed for catheter insertion
- non-detachable to avoid a component loss
- anti-kink catheter
- lateral connect for electrical cable: stimulation is possible whenever required without additional manipulation.



silverstim® is echogenic and stimulating for close positioning next to the nerve without a risk of lesion.

Catheter length	18G needle length	30° needle	30° split cannula	Tuohy needle	Packaging (box)
30 cm	35 mm	5198.353	5198.3533	-	10 / box
30 cm	50 mm	5198.503	5198.5033	5198.506	10 / box
50 cm	85 mm	5198.853	5198.8533	5198.856	10 / box
50 cm	100 mm	5198.103	-	-	10 / box
50 cm	120 mm	5198.123	5198.1233	-	10 / box 5 / box

### VYSET®

These references are also available in VYSET, with devices dedicated to ultrasound.

For more details, see page 13.



## Stimulating needle Single shot injection

This stimulating needle is insulated over its entire length. Its bevel is completely exposed for a large conduction of current, and for an easier needle insertion.

### Security

Quick identification of the bevel direction thanks to the black cable positioning.



### Ergonomic hub:

easy handling  
**Transparent:**  
Allows aspiration before injection for extra safety

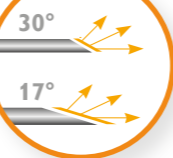
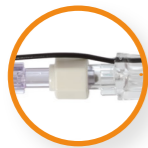
### Safety

**Centimetre markings:**  
Needle marked every centimetre on its circumference to identify the inserted length.



### Versatility

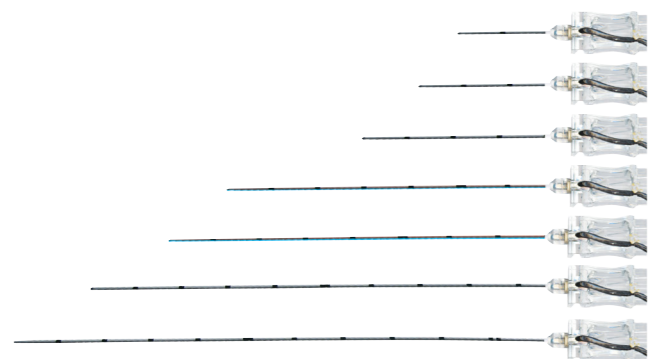
**Removable extension line:**  
for a direct connection to the syringe.



**A choice of 2 exposed bevels to fit your needs**  
30° bevel needles (short bevel) facilitate perception of the successive subcutaneous layers. It requires a greater force of penetration than 17° bevel needles (long bevel).

### Hygiene

A long (60cm) electrical cable to work at distance from sterile field.



Length	17° bevel	30° bevel	Gauge	Packaging
	Code	Code		
25 mm	5194.25	5194.253	23	20 / box
35 mm	5194.35	5194.353	23	20 / box
50 mm	5194.50	5194.503	20/21	20 / box
85 mm	5194.85	5194.853	21	20 / box
100 mm	5194.10	5194.103	21	20 / box
120 mm	5194.12	5194.123	20	20 / box
150 mm	5194.15	5194.153	20	20 / box

**VYSET®** These references are also available in VYSET, with devices dedicated to ultrasound. For more details, see page 13.



## Catheter with wishbone

Continuous injection  
Introduced through 17°, 30° or Tuohy needle

techniplex® is introduced through a puncture needle with 17°, 30° or Tuohy bevel. The wishbone allows an excellent control of the catheter's progress through the needle. The technical procedure is therefore rapid and simple with limited manipulations, and is aseptic thanks to the protective sheath.

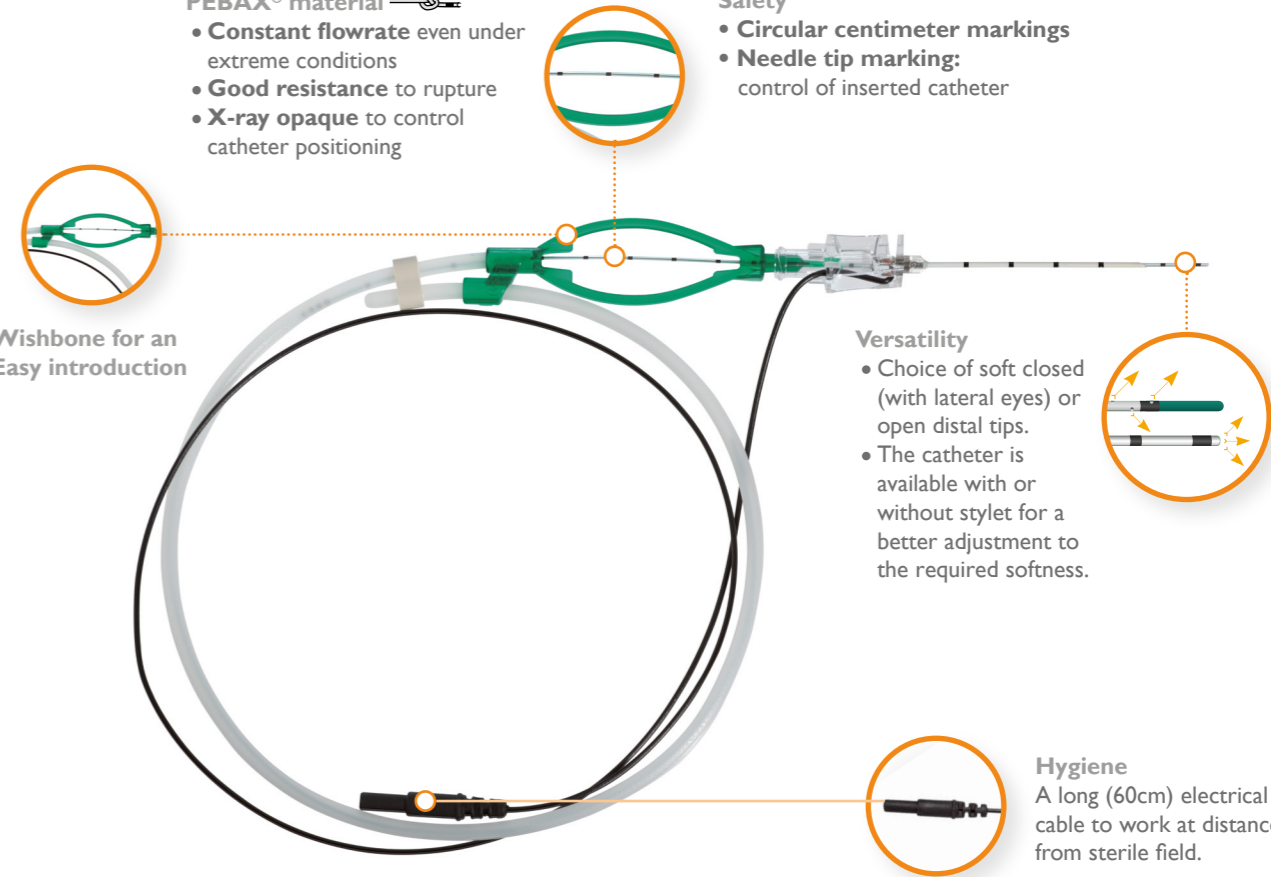
### PEBAX® material

- **Constant flowrate** even under extreme conditions
- **Good resistance** to rupture
- **X-ray opaque** to control catheter positioning

### Safety

- **Circular centimeter markings**
- **Needle tip marking:**  
control of inserted catheter

**Wishbone for an Easy introduction**



### Versatility

- Choice of soft closed (with lateral eyes) or open distal tips.
- The catheter is available with or without stylet for a better adjustment to the required softness.

### Hygiene

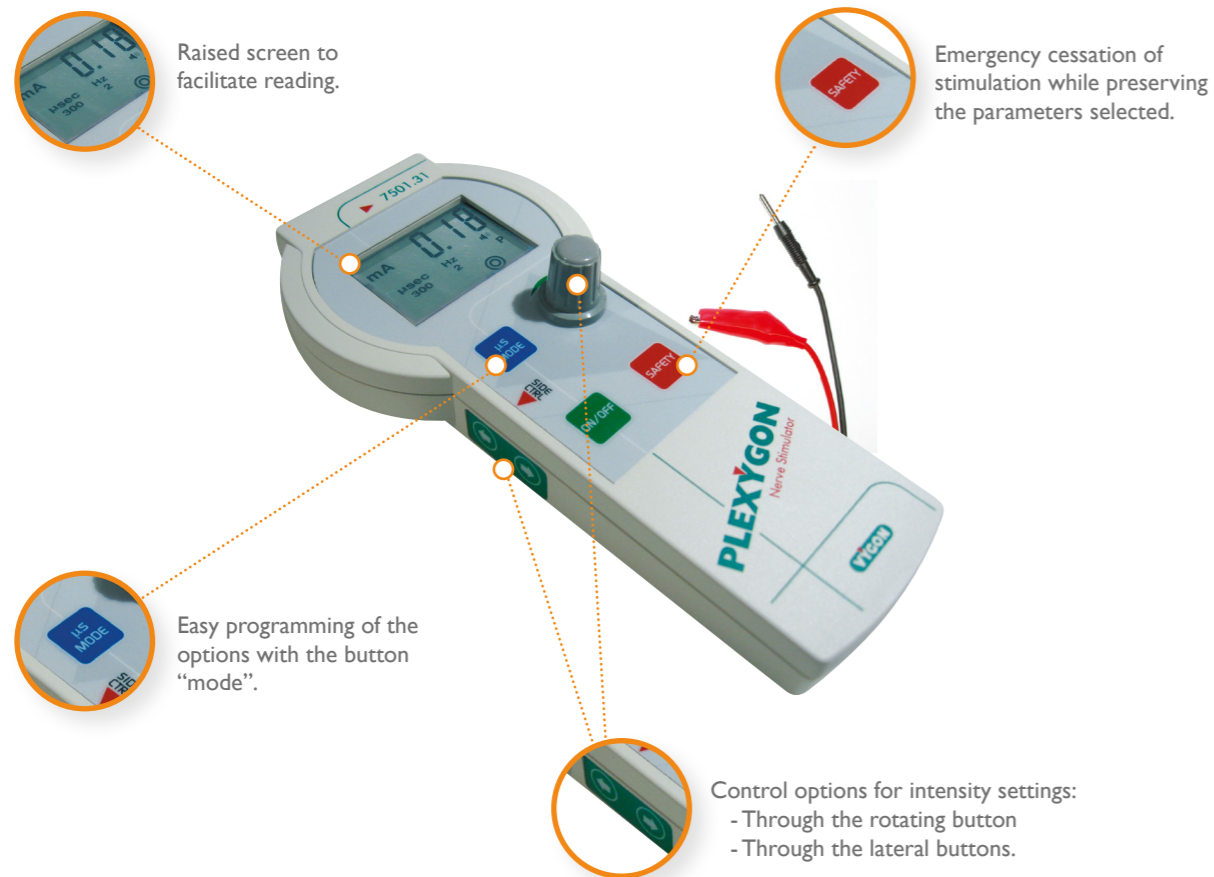
A long (60cm) electrical cable to work at distance from sterile field.

locoplex®  
techniplex® introduction needles have the same advantages as locoplex® needles.

Catheter	18G needle		Needle 17° bevel	Needle 30° bevel	Needle 30° bevel (catheter with stylet and soft closed distal tip (3 lateral eyes))	Needle Tuohy needle (catheter with stylet and soft closed distal tip (3 lateral eyes))	Packaging
	Length	G					
50 cm	20	35 mm	18	5195.35	5195.353	-	10 / box
50 cm	20	50 mm	18	5195.50	5195.503	5195.5031	10 / box 5 / box
50 cm	20	100 mm	18	5195.10	5195.103	5195.1031	10 / box 5 / box
50 cm	20	120 mm	18	5195.12	5195.123	-	10 / box
50 cm	20	150 mm	18	-	-	5195.1531	5 / box

## Simple and safe nerve stimulator

plexygon® provides simplicity and precision by the emission of low intensity electrical current.



Dimensions	Length : 200mm Max. width: 93mm - min : 57mm	Max. height: 40mm – min: 23mm
Weight	186g - 232g with battery	
Pulse duration	50 - 100 - 300µs	
Steps	0.1mA increment above 0.5mA - 0.02mA increment below 0.5mA	
Pulse frequency	1 - 2 - 4 Hz	
Battery	Pile 9 V	

Reference	Description
7501.31	plexygon® stimulation apparatus, battery, cable, supplied in a briefcase
087503.02A	plexygon® replacement cable (red & black)
39.00.15	plexygon® transparent protective hood 12 x 40 cm

## Custom packs

### VYSET® Custom packs

#### Why choose customisation?

Customisation with Vyset enables you to create a pack specific to your requirements, standardising insertion procedures and ensuring maximum barrier precautions, therefore reducing the associated risk of infection.

#### Saving time and money

- Reducing preparation time
- Improving stock management
- Reducing waste

#### Improving safety

- Reducing the risk of infection
- Reducing the risk of errors
- Improving working conditions
- Simplifying procedures which helps in emergency cases or when a practitioner works alone
- Traceability (one label + barcode)

#### The Vygon expertise

- Assembly and sterilisation in our own facilities in Europe
- Selection of only high quality medical devices
- Sales teams at your disposal to provide any additional training, help and advice needed to ensure your pack is a success
- Continuous monitoring of usage rates.

VYSET® in ... operating room - vascular access - regional anaesthesia - neonatology



## VYSET® for Regional Anesthesia

VYSET® provides all devices needed for a procedure, in the best aseptic conditions.

All needles and catheters dedicated to peripheral blocks are available within VYSET® together with:

- **Transparent drape with a large fenestration**  
To scan the puncture area.



- **Adjustable drape 2 fenestrations**  
Can be used for upper and lower limbs.



- **Sponge sticks**



- **Ultrasound transmission gel**  
Compact - doesn't stick.



- **Gallipots**  
Different colours to differentiate drugs from disinfectant.



- **Safe hypodermic needles**  
To avoid needle-stick injuries.



- **Probe covers**



Adhesive cover: **AD Cover**  
Avoid using gel between the probe and the probe cover.



For more information and for the set creation, feel free to contact your Vygon representative.

echosupport



In order to ease procedures with ultrasounds, echosupport hold the probe for you.

**Code 7507.515: universal probe holder**

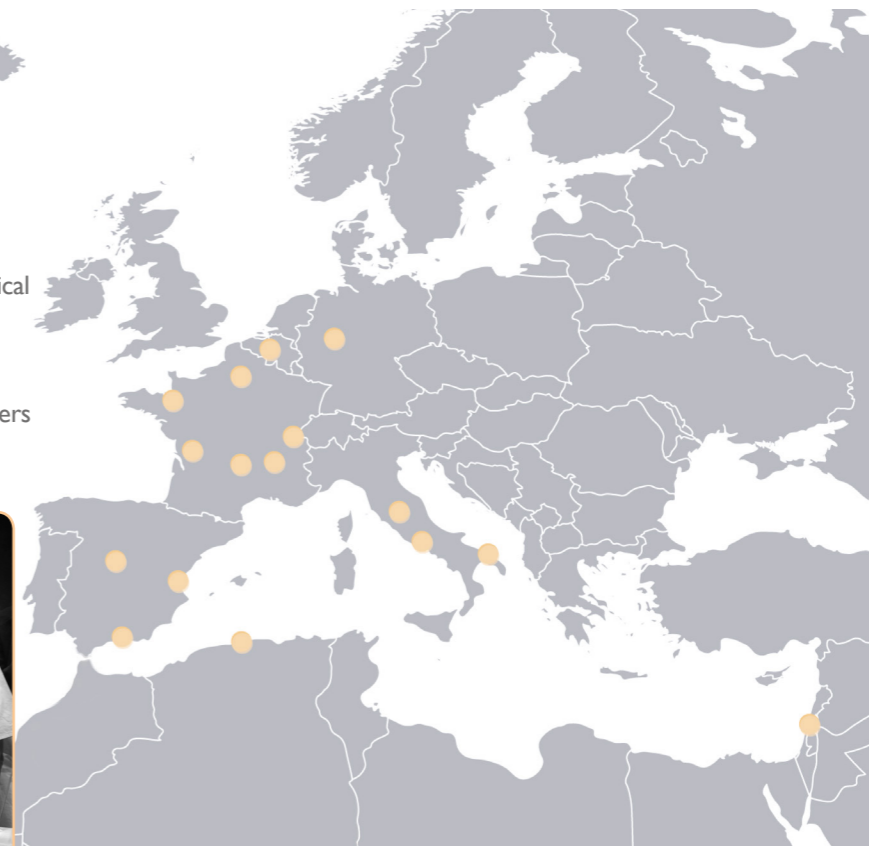


## Training centres

Vygon helps Regional Anesthesia specialists develop their new techniques thanks to a network of experts across Europe.

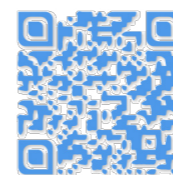
### Training objectives:

- Presentation of ultrasound machines and their basic settlements
- Presentation of the anatomical structures
- Puncture techniques with ultrasound
- Indication and use of catheters with ultrasound.



## Educational guide: E-Guide Regional Anaesthesia

Regional anesthesia is constantly improving. Vygon has developed a special application, in collaboration with Dr Xavier Paqueron and Dr Yann Cimino (Fontaine-les-Dijon private hospital, France), in order to help practitioners update their knowledge of regional anesthesia.



Available on the App Store



Available on the Android Market

Scan to download the application **free**





 ANAESTHESIA EMERGENCY

**For further information, please contact: [questions@vygon.com](mailto:questions@vygon.com)**

The specifications shown in this leaflet are for information only and are not, under any circumstances, of a contractual nature.

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