



REGIONAL ANAESTHESIA
Peripheral Nerve Blocks



vygoplex[®]
The new PNB range

Available in both LUER or NRFit™



Value Life

Product index

I. NRFit™: The new secure connection for neuraxial & regional application

NRFit™: A range developed for more patient safety ...p.4

II. vygoplex® needles

vygoplex® echo NRFit™p.8

vygoplex® ENS & echo NRFit™p.9

vygoplex® echo Luerp.10

vygoplex® ENS & echo Luerp.11

How to use the VISE device ?p.12

III. NRFit™ Accessories

A full range of NRFit™ accessories designed for totally safe proceduresp.14

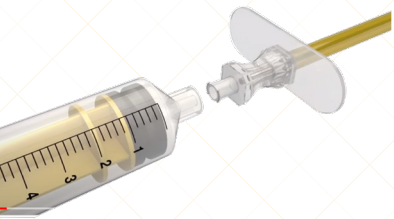
IV. NRFit™ with Vygon

How to switch to NRFit™?p.17

NRFit™: The new secure
connection for neuraxial &
regional application

NRFit™: A range developed for more patient safety

- What is NRFit™ ? [1]



The ISO 80369 series of Standards for small bore-connectors, aims to avoid misconnections between unrelated delivery systems (such as intravenous, enteral and epidural routes) which can cause injuries and death to patients.

ISO 80369-6 is part 6 of the ISO 80369 series, which is dedicated to neuraxial applications. Part 6 details all the dimensions, performances, materials, and drawings of the new neuraxial standard connector.

NRFit™ is the trade name of the new neuraxial standard connector compliant with ISO 80369-6.

- Why switch to NRFit™ ?

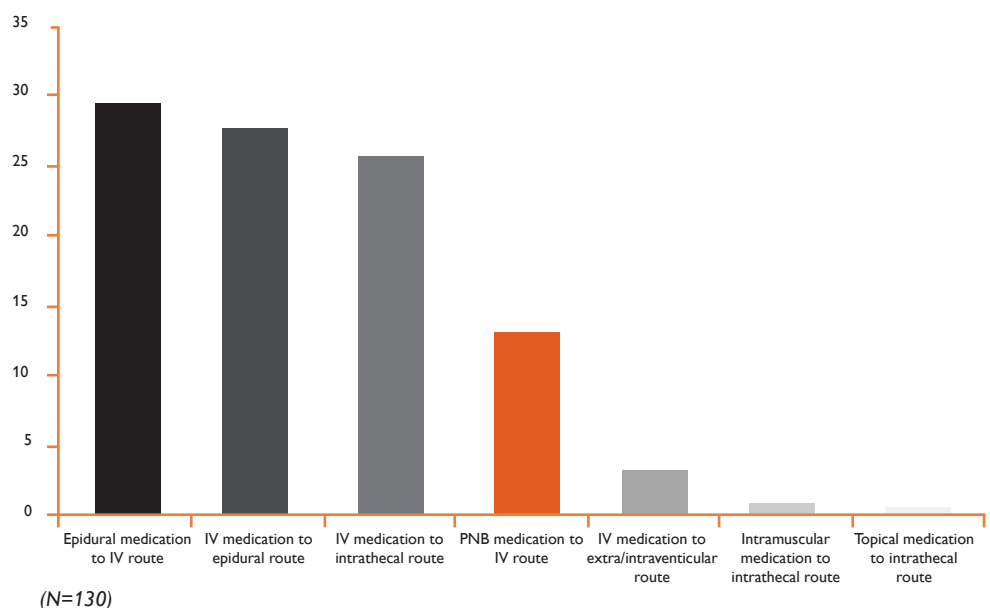
For years, drug errors have caused acute levels of harm and deaths due to neuraxial misconnection.

8% of medication errors in anesthesia are due to incorrect administration route [2]

Some of these accidents are due to local anaesthetics being injected incorrectly due to syringe swaps, wrong dose (of the correct drug), or ampoule swaps.[3]

Over the last 20 years, several neuraxial and peripheral nerve block misconnection errors have been identified in case reports.

13% of unintentional administration of a peripheral nerve block via the intravenous route [6]



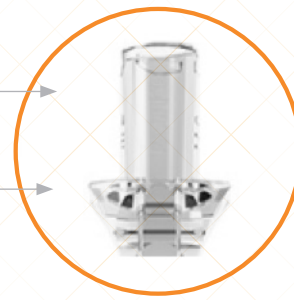
Neuraxial and peripheral nerve block misconnection errors identified in case reports between 1999 and 2019. [6]

- NRFit™ & Luer: What changes in the connection ?^[4,5]



Luer

Diameter is reduced by 20%
Hub is approximately 30% longer



NRFit™



The end of the NRFit™ tip is at the level of the collar.



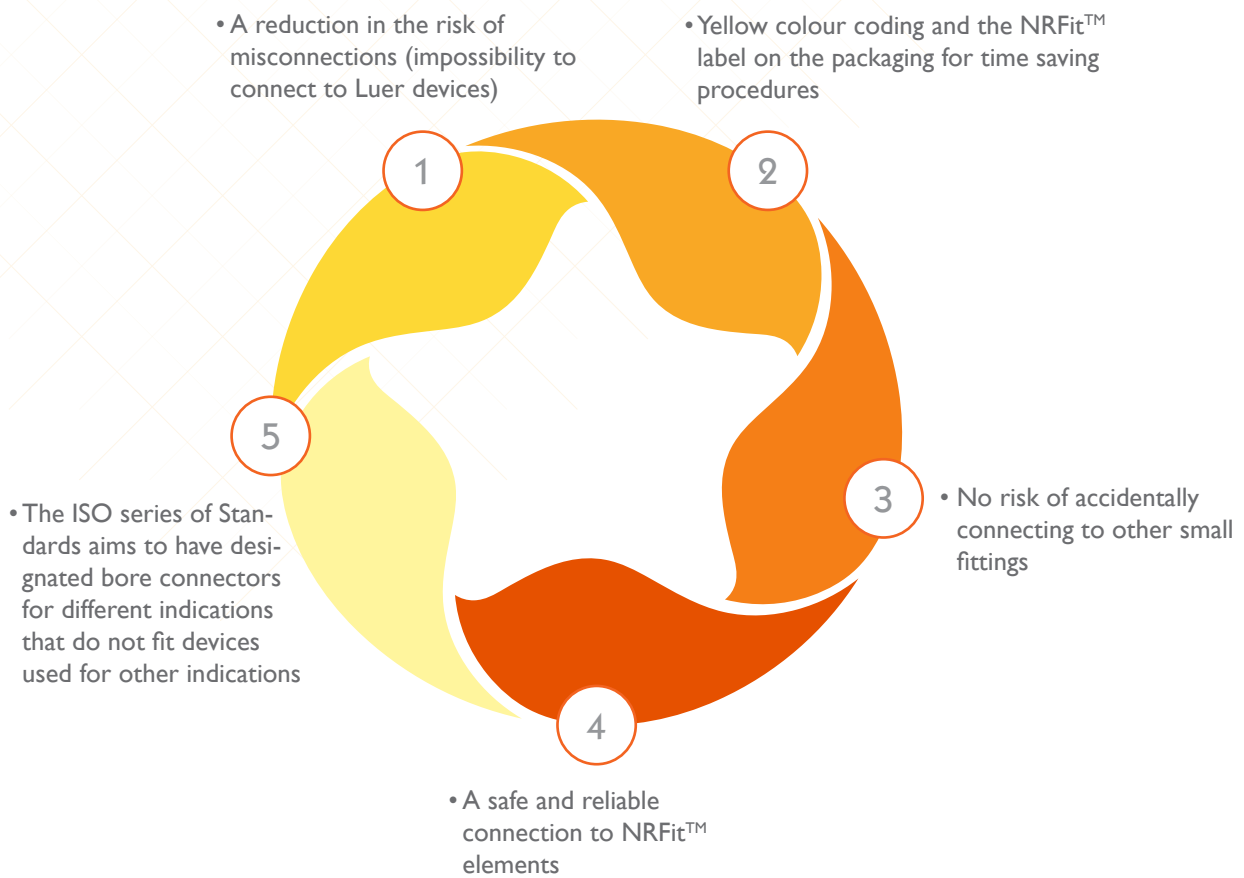
- NRFit™ & Luer: No possible compatibility



- NRFit™ designed devices are compatible with NRFit™ designed devices
- LUER designed devices are compatible with LUER designed devices
- NRFit™ designed devices are incompatible with LUER designed devices



- What are the advantages of switching to NRFit™?



vygoplex[®]
needles

vygoplex[®]: The new generation of echogenic needles

Single shot needles for peripheral nerve blocks

• vygoplex[®] echo NRFit[™]

01 NEEDLE

For optimized echogenicity under ultrasound

Sandblasting and PTFE coating surrounding the entire needle all the way up to the tip for smooth insertion.

For precise control of the needle depth

360° marking on every millimeter on the first 2 cm & a double mark at 5 cm allowing control of the needle's position all through the procedure

03 HUB

For quick identification of the NRFit[™] needle & clear visualization of a possible blood reflux

Yellow transparent hub

For easy handling

Curved & ergonomic hub

02 BEVEL

For a more or less important perception of the fascias

Choice between 2 types of lancet point bevels :

- 20°
- 30°



04 EXTENSION LINE

For easy injection

Removable extension line which enables the connection of a syringe directly to the needle if required

Code	Length (mm)	Gauge (G)	Bevel	Bevel Type	Quantity (box)
AEQMNVF24080	80	24	30°	Lancet point	10 / box
AEQMNVF24040	40	24			10 / box
AEQMNVF25050	50	25			10 / box
AEQMNVF25080	80	25			10 / box
AEQMNVF25120	120	25			10 / box
AEQMNVF22050	50	22			10 / box
AEQMNVF22080	80	22			10 / box
AEQMNVF21100	100	21			10 / box
AEQMNVF20100	100	20			10 / box
AEYMNVF24080	80	24			20°
AEYMNVF24040	40	24	10 / box		
AEYMNVF25050	50	25	10 / box		
AEYMNVF25080	80	25	10 / box		
AEYMNVF25120	120	25	10 / box		
AEYMNVF22050	50	22	10 / box		
AEYMNVF22080	80	22	10 / box		
AEYMNVF21100	100	21	10 / box		
AEYMNVF20100	100	20	10 / box		

• **vygoplex® ENS & echo NRFit™**

01 NEEDLE

For optimized echogenicity under ultrasound
Sandblasting and PTFE coating surrounding the entire needle all the way up to the tip

For precise control of the needle depth
360° marking on every millimeter on the first 2 cm & a double mark at 5 cm allowing control of the needle's position all through the procedure

03 HUB

For quick identification of the NRFit™ needle & clear visualization of a possible blood reflux
Yellow transparent hub

For easy handling
Curved & ergonomic hub

02 BEVEL

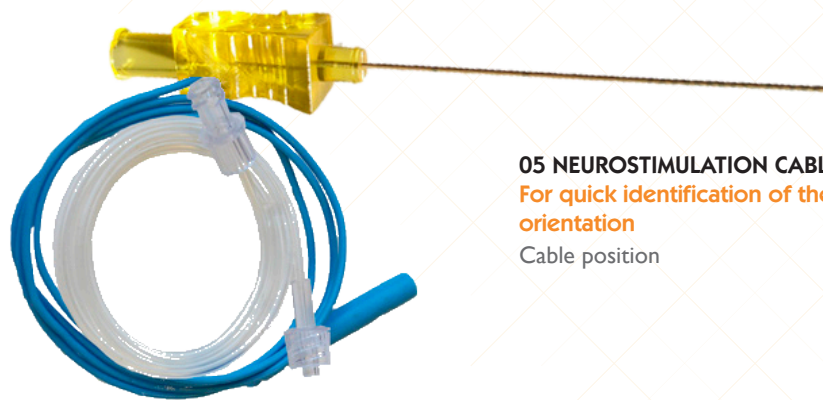
For a more or less important perception of the fascias
Choice between 2 types of lancet point bevels :
• 20°
• 30°

04 EXTENSION LINE

For easy Injection
Removable extension line which enables the connection of a syringe directly to the needle if required

05 NEUROSTIMULATION CABLE

For quick identification of the bevel orientation
Cable position



Code	Length (mm)	Gauge (G)	Bevel	Bevel Type	Quantity (box)
AEYMF25050	50	25	20°	Lancet point	10 / box
AEYMF25080	80	25			10 / box
AEYMF25120	120	25			10 / box
AEYMF24040	40	24			10 / box
AEYMF24100	100	24			10 / box
AEYMF24080	80	24			10 / box
AEYMF24070	70	24			10 / box
AEYMF23035	35	23			10 / box
AEYMF22050	50	22			10 / box
AEYMF22080	80	22			10 / box
AEYMF21100	100	21			10 / box
AEYMF21120	120	21			10 / box
AEYMF20120	120	20			10 / box
AEQMF25050	50	25			30°
AEQMF25080	80	25	10 / box		
AEQMF25120	120	25	10 / box		
AEQMF24040	40	24	10 / box		
AEQMF24100	100	24	10 / box		
AEQMF24080	80	24	10 / box		
AEQMF24070	70	24	10 / box		
AEQMF23035	35	23	10 / box		
AEQMF22050	50	22	10 / box		
AEQMF22080	80	22	10 / box		
AEQMF21100	100	21	10 / box		
AEQMF21120	120	21	10 / box		
AEQMF20120	120	20	10 / box		

• **vygoplex® echo luer**

01 NEEDLE

For optimized echogenicity under ultrasound

Sandblasting and PTFE coating, for smooth insertion surrounding the entire needle all the way up to the tip

For precise control of the needle depth

360° marking on every millimeter on the first 2 cm & a double mark at 5 cm allowing control of the needle's position all through the procedure

02 BEVEL

For a more or less important perception of the fascias

Choice between 2 types of lancet point bevels :

- 20°
- 30°

03 HUB

For clear visualization of a possible blood reflux

Transparent hub

For easy handling

Curved & ergonomic hub



04 EXTENSION LINE

For easy injection

Removable extension line which enables the connection of a syringe directly to the needle if required

Code	Length (mm)	Gauge (G)	Bevel	Bevel Type	Quantity (box)
AEQMNV24080	80	24	30°	Lancet point	10 / box
AEQMNV24040	40	24			10 / box
AEQMNV25050	50	25			10 / box
AEQMNV25080	80	25			10 / box
AEQMNV25120	120	25			10 / box
AEQMNV22050	50	22			10 / box
AEQMNV22080	80	22			10 / box
AEQMNV21100	100	21			10 / box
AEQMNV20100	100	20			10 / box
AEYMNV24080	80	24			20°
AEYMNV24040	40	24	10 / box		
AEYMNV25050	50	25	10 / box		
AEYMNV25080	80	25	10 / box		
AEYMNV25120	120	25	10 / box		
AEYMNV22050	50	22	10 / box		
AEYMNV22080	80	22	10 / box		
AEYMNV21100	100	21	10 / box		
AEYMNV20100	100	20	10 / box		

• **vygoplex® ENS & echo luer**

01 NEEDLE

For optimized echogenicity under ultrasound

Sandblasting and PTFE coating surrounding the entire needle all the way up to the tip

For precise control of the needle depth

360° marking on every millimeter on the first 2 cm & a double mark at 5 cm allowing control of the needle's position all through the procedure

02 BEVEL

For a more or less important perception of the fascias

Choice between 2 types of lancet point bevels :

- 20°
- 30°

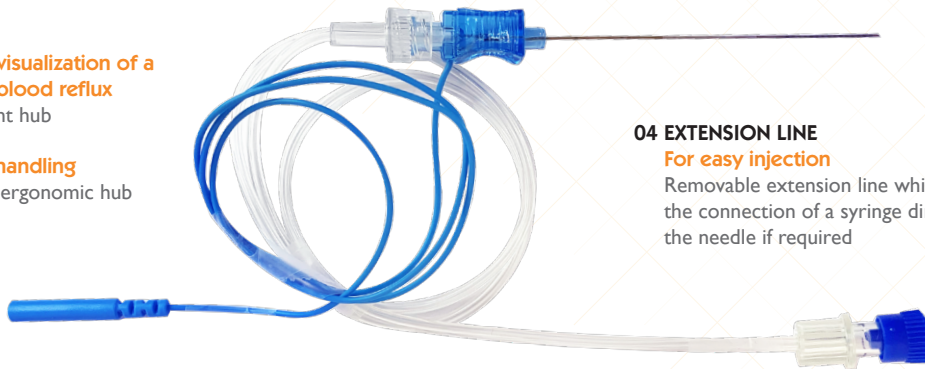
03 HUB

For clear visualization of a possible blood reflux

Transparent hub

For easy handling

Curved & ergonomic hub



04 EXTENSION LINE

For easy injection

Removable extension line which enables the connection of a syringe directly to the needle if required

05 NEUROSTIMULATION CABLE

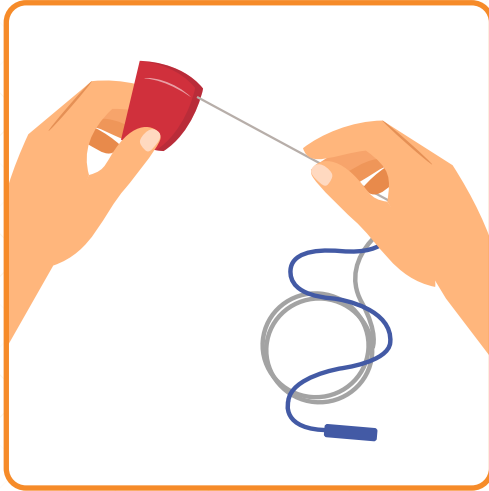
For quick identification of the bevel orientation

Cable position

Code	Length (mm)	Gauge (G)	Bevel	Bevel Type	Quantity (box)
AEYMV25050	50	25	20°	Lancet point	10 / box
AEYMV25080	80	25			10 / box
AEYMV25120	120	25			10 / box
AEYMV24040	40	24			10 / box
AEYMV24100	100	24			10 / box
AEYMV24080	80	24			10 / box
AEYMV24070	70	24			10 / box
AEYMV23035	35	23			10 / box
AEYMV22050	50	22			10 / box
AEYMV22080	80	22			10 / box
AEYMV21100	100	21			10 / box
AEYMV21120	120	21			10 / box
AEYMV20120	120	20			10 / box
AEQMV25050	50	25			30°
AEQMV25080	80	25	10 / box		
AEQMV25120	120	25	10 / box		
AEQMV24040	40	24	10 / box		
AEQMV24100	100	24	10 / box		
AEQMV24080	80	24	10 / box		
AEQMV24070	70	24	10 / box		
AEQMV23035	35	23	10 / box		
AEQMV22050	50	22	10 / box		
AEQMV22080	80	22	10 / box		
AEQMV21100	100	21	10 / box		
AEQMV21120	120	21	10 / box		
AEQMV20120	120	20	10 / box		

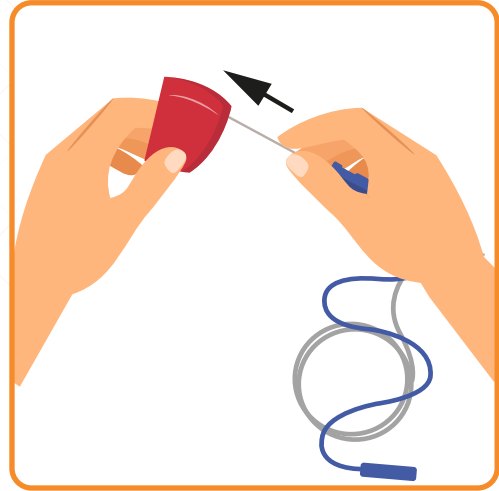
How to use the VISE device ?

Every vygoplex® needle will be provided with a VISE device.



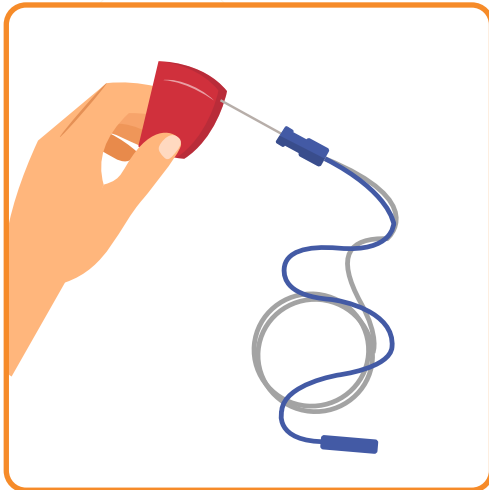
Step 1

At the end of the procedure, take the VISE device and the used needle.



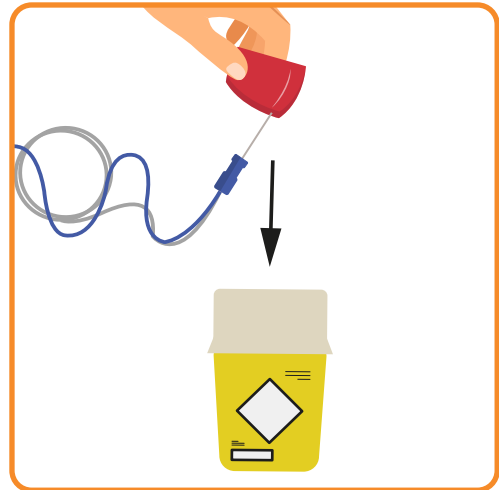
Step 2

Insert the used needle into the VISE device.



Step 3

The needle is safely trapped in the VISE device and can no longer be removed from the device.



Step 4

Dispose of the needle and the VISE device in the waste garbage container provided for this purpose according to the specific hospital procedures.

NRFit™

Accessories

● A full range of NRFit™ accessories designed for totally safe procedures

80822A1

Antibacterial filter



Code	Designation	Quantity Box/case
80822A1	Filter	25/600

V051010
Syringes



Code	Designation
V051010051A1	neurafit syringe 5 mL slip
V051010052A1	neurafit syringe 5 mL lock
V051010101A1	neurafit syringe 10 mL slip
V051010102A1	neurafit syringe 10 mL lock
V051010201A1	neurafit syringe 20 mL slip
V051010202A1	neurafit syringe 20 mL lock
V051010602A1	neurafit syringe 60 mL lock

NRFit™ with
Vygon

How to switch to NRFit™ ?

Vygon will be your partner during the NRFit™ transition

Our teams are at your side to advise and help you through this conversion by following the guidelines given by GEDSA:

AWARE	<p>Communicate We will communicate on the importance of NRFit™ connectors among hospital staff (clinicians, nurses, Quality and safety personnel, ...) > <i>To enhance patient safety</i></p>
	<p>Understand We will help you understand all of our product-specific changes affected by NRFit™ > <i>To familiarize yourself with our NRFit™ ranges/products</i></p>
	<p>Anticipate We will help you anticipate the timing of the transition > <i>To ensure a smooth transition</i></p>
PREPARE	<p>Education We will be engaged in your physician & nursing education teams > <i>By organizing hands-on training opportunities</i></p>
	<p>Availability We will be available to discuss implications of impending NRFit™ changes and transition process > <i>By communicating the date of the transition within your facility</i></p>
	<p>Support We will support you during the transition to include our new NRFit™ products > <i>By assessing and adapting existing systems, processes and protocols with multidisciplinary transition teams</i></p>
ADOPT	<p>Help you We will help you meet milestone transition dates > <i>By making our staff available on the day of the transition as there is likely to be a lot of equipment to be moved around your facility</i></p>
	<p>Reinforce Together we will reinforce long-term benefits over short-term inconvenience</p>

References

- [1] ISO 80369-6:2016, Small bore connectors for liquids and gases in healthcare applications — Part 6: Connectors for neuraxial applications, <https://www.iso.org/obp/ui/#iso:std:iso:80369:-6:ed-1:v2:en> (consulted on 08/02/2021)
- [2] Dhawan I, Tewari A, Sehgal S, Sinha AC. Medication errors in anesthesia: unacceptable or unavoidable? *Braz J Anesthesiol.* 2017 Mar-Apr;67(2):184-192. doi: 10.1016/j.bjane.2015.09.006. Epub 2016 May 16. PMID: 28236867.
- [3] Fasting S, Gisvold SE. Adverse drug errors in anesthesia, and the impact of coloured syringe labels. *Can J Anaesth.* 2000 Nov;47(11):1060-7. doi: 10.1007/BF03027956. PMID: 11097534.
- [4] GEDSA, NRFit® New Design Overview, <https://www.youtube.com/watch?v=aFkm-goLnnQ> (consulted on 15/02/2021)
- [5] PIRIOU, V., NRFit: une nouvelle connexion point de vue d'un anesthésiste réanimateur, Journées Euro-Pharmat Nancy, 2018
- [6] Viscusi ER, Hugo V, Hoerauf K, et al., Neuraxial and peripheral misconnection events leading to wrong-route medication errors: a comprehensive literature review, *Regional Anesthesia & Pain Medicine* Published Online First: 03 November 2020. doi: 10.1136/rapm-2020-101836

Legal Disclaimer

NRFit™ Range Peripheral Nerve Blocks - **vygoplex** echo - **vygoplex** ENS & echo - **neurafit**™ Filter - **neurafit**™ Syringes – Medical devices indicated for Peripheral Nerve Blocks, – **vygoplex** needles and extension line, class IIa, Sterile, CE 0426 – Filter, class IIa, Sterile, CE 0459 – Syringes, class Is, sterile, CE 0459

Manufacturer : MDL SRL, Via Tavani 1/A Delebio (So), Italy, 23014

Distributor : VYGON 5, rue Adeline 95440 Ecoen, France.

These devices must be used by trained healthcare professionals. Please refer to the IFU for more information.

For reimbursement information, please refer to your local market and health insurance organization

ANAESTHESIA & EMERGENCY

For further information, please contact: marketingbenelux@vygon.com


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

SA VYGON NV • Haachtsesteenweg 1650 • Chaussée de Haecht 1650 • 1130 BRUSSELS • BELGIUM

Tel: +32 (0)2 706 09 50 • www.vygon.be

Vygon Nederland BV • Kerkhofstraat 21 • 5554 HG VALKENSWAARD • NETHERLANDS

Tel: +31 (0)40 208 93 80 • www.vygon.nl

 Vygon Benelux
VY21051


www.vygon.be
www.vygon.nl