

B. Braun Peripheral Nerve Blocks

New Innovation for Best Patient Care

New Ultrasound Product Platform

Ultrasound is revolutionizing the way peripheral Regional Anesthesia is being performed today. B. Braun's answer to the emerging customer needs with respect to ultrasound friendly Regional Anesthesia products is the Ultraline platform. The Ultraline initial package includes four products: two single shot cannulas and two continuous nerve block sets. The development of our echogenic portfolio concentrates on precision and patient safety. B. Braun has developed an unique precision laser technology, that allows us to optimize the ultrasound visibility of our needles, without compromising on the worldwide appreciated feel of our first class needles.

More information on www.ultraline-bbraun.com.




The Next Generation Catheter System

Contiplex® C stands for the second area of innovation for this dynamic medical discipline of peripheral Regional Anesthesia. The patented Multi-talent from B. Braun is the next generation of continuous peripheral nerve block system. Contiplex® C brings the best of both worlds together: single shot similar handling with the pain treatment abilities of a nerve block catheter.

Regardless of the technique and the approach you choose, B. Braun remain committed to offer you the right products and services to deliver the best patient care possible.

More information on www.contiplexc-bbraun.com

Whichever road you take ...

 Nerve Stimulation	 Dual Guidance	 Ultrasound
Single Shot Stimuplex® A Stimuplex® D	Stimuplex® Ultra Stimuplex® D Plus	Ultraplex®
Continuous Technique Contiplex® D Contiplex® S Contiplex® Tuohy	Contiplex® C Contiplex® S Ultra Contiplex® Tuohy Ultra	

... B. Braun has the right products to get you there.

As easy as a single shot with the power of a catheter

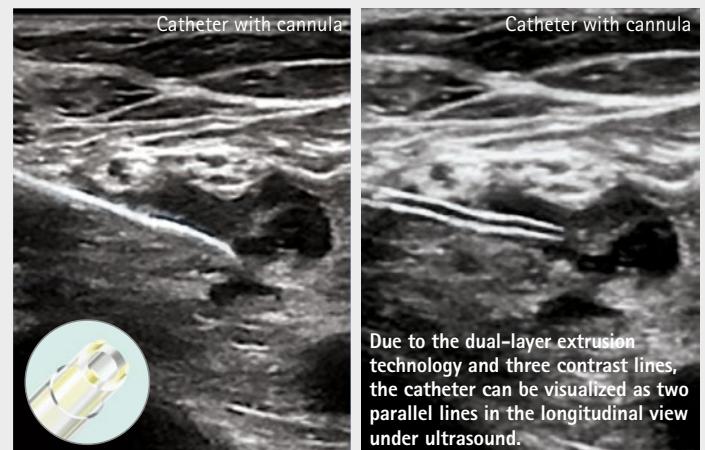
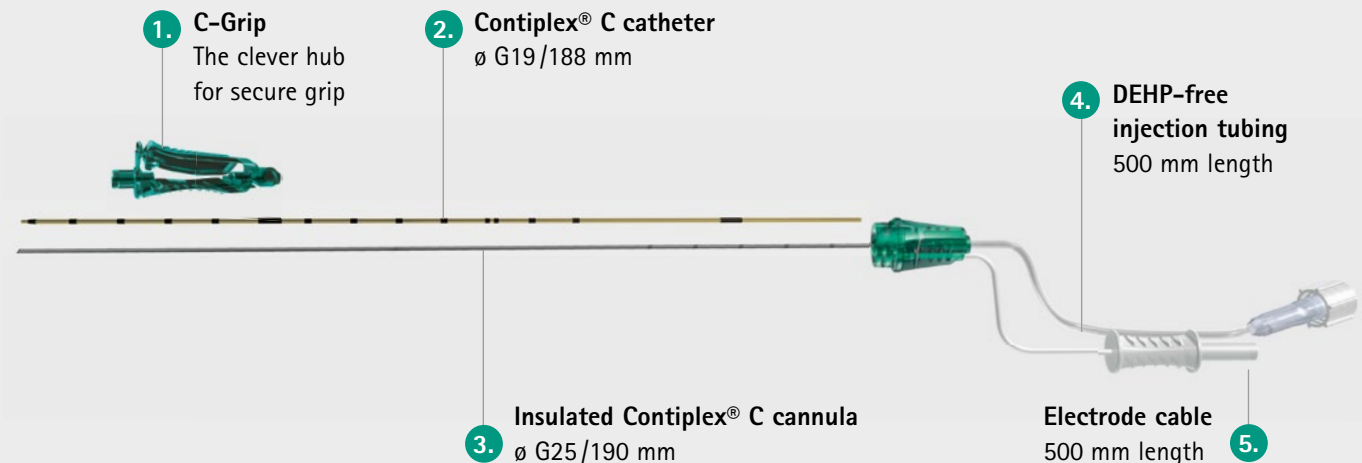
Contiplex® C is a novel and patented catheter placement system that makes continuous nerve blocks better, easier, and safer. The innovative catheter-over-the-needle design helps to overcome several of the limitations associated with peripheral catheters.

Further, the system provides optimized handling for ultrasound guided catheter placement.

User benefits

- Ideal for ultrasound: Highly echogenic catheter and ultrasound friendly handling that enables one handed catheter placement
- Less complexity: Fewer and more effective handling steps.
- Less leakage: More precise and reliable catheter placement.
- Less trauma¹: More patient comfort with G25 puncture cannula.

¹Steinfeldt T. Nerve injury by needle nerve perforation in regional anesthesia: does size matter? Br J Anaesth 2010. 104:245-53



Ultrasound pictures provided by Dr. S. Bloc, Claude Galien Private Hospital France

B. Braun Peripheral Nerve Blocks

Single-shot Technique

Single shot unipolar needles provide the basic anesthesia for short-term interventions or additional single nerve blocks in continuous techniques.

Stimuplex® A

- With depth markings to identify puncture depth
- Crystal clear coating for excellent gliding through all tissue layers
- Well-proven puncture characteristics of 30° facet bevel

Stimuplex® D

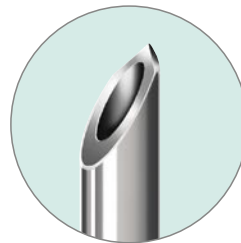
- Atraumatic fully coated stimulation needle
- Pin point electrode for precise nerve stimulation
- Available in 15° or 30° facet bevels according to personal gliding and puncture behavior preferences

Stimuplex® D Plus

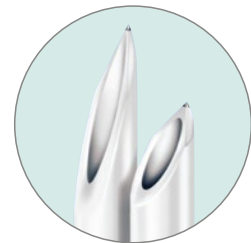
- Same features as Stimuplex® D
- Excellent ultrasound visibility through echogenic laser markings

User benefits

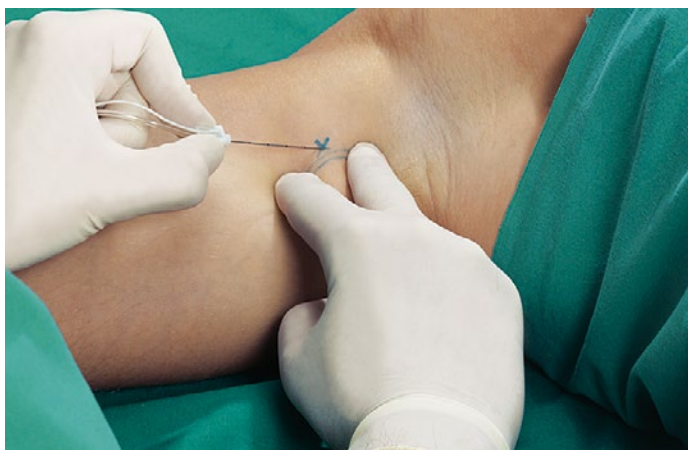
- Excellent puncture and gliding characteristics
- Comprehensive assortment of needle lengths from 35 to 150 mm and G25 to G20 sizes
- Ergonomic needle hub for enhanced tactile feedback



Stimuplex® A
30° bevel



Stimuplex® D 15°
or 30° bevel and
Stimuplex® D Plus
15° or 30° bevel



Stimuplex® Ultra and Ultraplex®

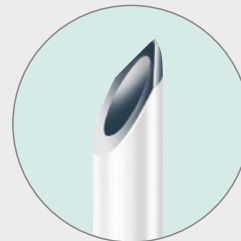
New

Stimuplex® Ultra

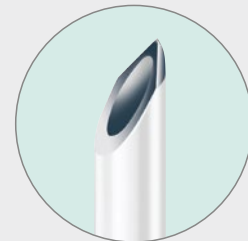
- For nerve stimulation and ultrasound
- Laser-crafted ultrasound reflectors with safety code pattern
- Well-approved 30° facet bevel with back cut
- High quality low friction coating
- 50 cm long DEHP-free injection tubing

Ultraplex®

- A non-stimulating ultrasound only needle
- Laser-crafted ultrasound reflectors with safety code pattern
- Well-approved 30° facet bevel with back cut
- High quality low friction coating
- 50 cm long DEHP-free injection tubing



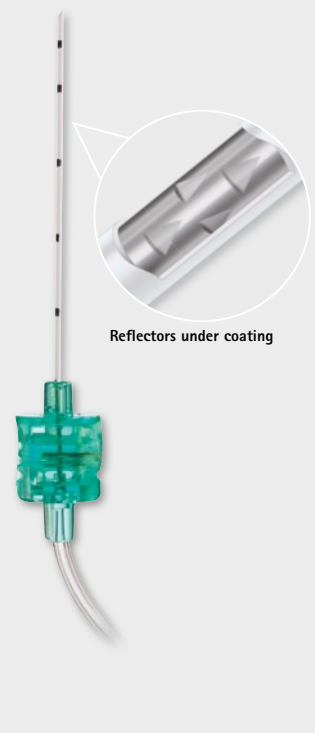
Stimuplex® Ultra
30° bevel



Ultraplex®
30° bevel



Reflectors under coating



Reflectors under coating

User benefits

- Echogenic laser markings facilitate excellent needle visualization with minimal acoustic shadowing.¹
- 50 cm long DEHP-free injection tubing. Same good puncture and gliding behavior of the cannulas.
- Ultrasound reflectors at multiple sites for easy needle detection.

¹ Reg Anesth Pain Med. 2010 Sep-Oct;35(5):E191.



B. Braun Peripheral Nerve Blocks

Continuous Technique

Continuous peripheral nerve block catheter sets allow pain relief during and after surgical procedures, providing the best possible patient recovery.

Contiplex® D

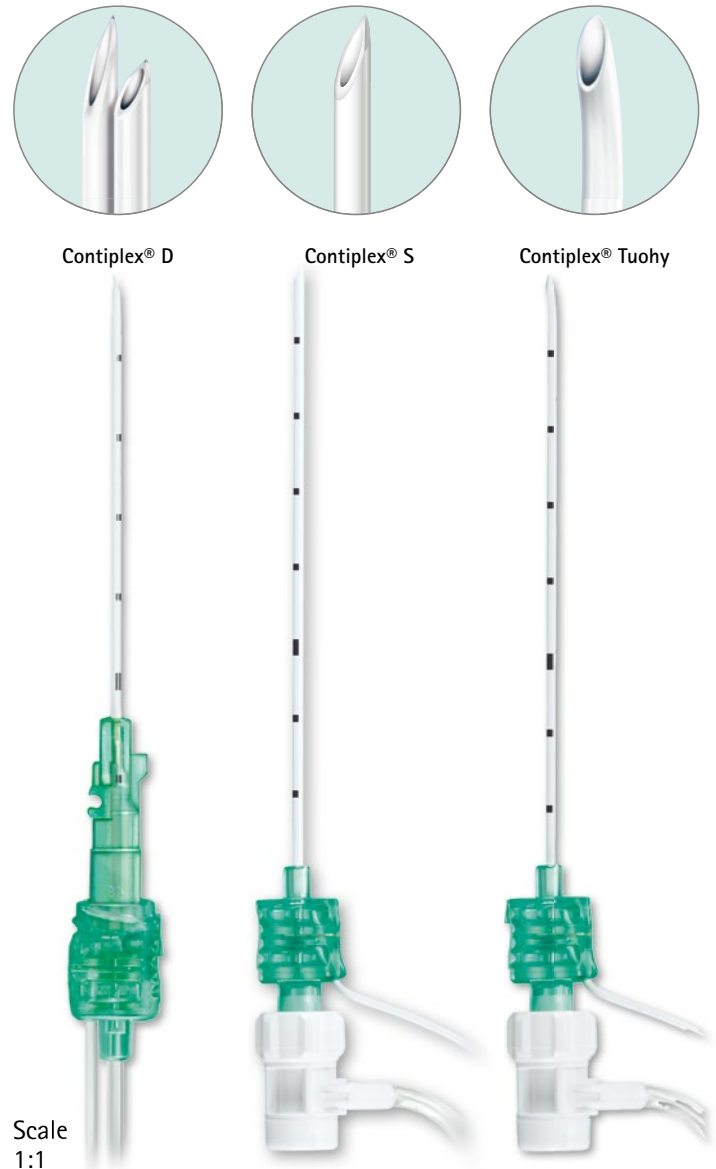
- 15° or 30° pin point facet tip
- Braunula catheter placement system

Contiplex® S

- 20° facet bevel with pin point electrode
- Through-the-needle system

Contiplex® Tuohy

- Fully coated Tuohy needle with pin point tip
- Through-the-needle system



User benefits

- Wide range of catheter sets in cannula sizes G18 and G20 and lengths from 40-150 mm and catheters in 400, 500, and 1000 mm length
- Easy advancement and effective catheter placement with through-the-needle or Braunula Contiplex® system
- Improved ultrasound visibility of new Contiplex® catheter



Contiplex® set components

- Insulated Contiplex® needle with integrated wire
- Catheter with threading assist guide
- Hemostasis Valve/Sideport (only for Contiplex® S/Contiplex® Tuohy)
- Perifix® catheter connector
- Perifix® filter
- Perifix® PinPad
- Omnifix® 5ml syringe
- Catheter label (Nerve blocks)

Contiplex® S Ultra and Contiplex® Tuohy Ultra

New

Contiplex® S Ultra

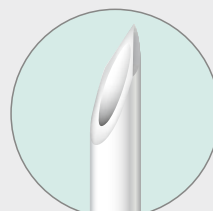
- For Nerve stimulation and ultrasound
- Fully coated 20° facet bevel with micro-dot electrode
- Catheter through-the-needle system
- With laser-crafted ultrasound reflectors for improved echogenicity

Contiplex® Tuohy Ultra

- For Nerve stimulation and ultrasound
- Fully coated Tuohy bevel with micro-dot electrode
- Catheter through-the-needle system
- With laser-crafted ultrasound reflectors for improved echogenicity



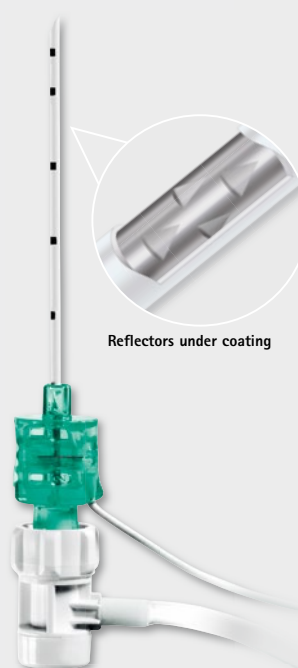
Contiplex®
Sideport adapter



Contiplex® S Ultra
20° bevel



Contiplex® Tuohy
Ultra



Reflectors under coating



Reflectors under coating

Scale
1:1

User benefits

- Laser-reflector enhanced puncture needles for excellent echogenicity
- Improved ultrasound visibility of Contiplex® Ultra catheter
- Sideport adapter for simultaneous injection/aspiration and catheter threading

Contiplex® Ultra catheter with tapered tip and three pairs of lateral eyes

"Higher rigidity, better tip design and improved ultrasonic image facilitate perineural insertion of this catheter. Using long-axis (LAX) scans the nerve, the needle, the advancement and final positioning of the catheter as well as the spread of local anaesthetic, can all be imagined sequentially improving visual control."

Koscielniak-Nielsen ZJ, Rasmussen H, Hesselbjerg L.

Long-axis ultrasound imaging of the nerves and advancement of perineural catheters under direct vision: A preliminary report of four cases.

Reg Anesth Pain Med 2008 (in press)

CATHETER



Peripheral
Nerve Blocks

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Stimuplex® HNS 12 with SENSE

The enlarged full graphic LC-display gives you all necessary information at a glance. High contrast and a wide viewing angle ensure excellent readability.

The following information is permanently displayed:

- Stimulus amplitude in mA (large digits)
- Stimulus duration in ms
- Stimulus frequency in Hz
- Load impedance in $k\Omega$
- Charge delivered (in nC, if activated)

User benefits

- Now with SENSE technology for safer, easier and more efficient nerve stimulation
- Advanced ergonomic shape and large display
- Digital ratchet dial for precise and tactile current adjustment
- Quick access buttons allow direct switching of key parameter values during procedure
- Alarm screens and acoustic signals inform the user of any relevant deviations



Transcutaneous nerve mapping with Stimuplex® Pen

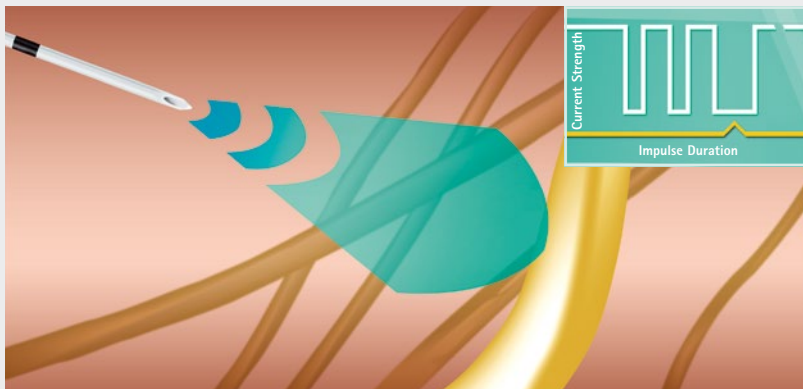


What is SENSE?

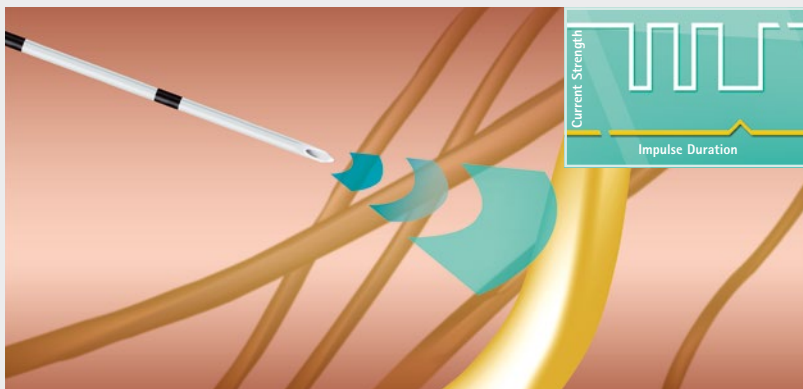
Easier with SENSE

SENSe is a further development on the Stimuplex® HNS 12 offering more patient safety and improved clinical efficiency. In practice, marginal needle movements often lead to losing the muscle twitch. The SENSE technology (Sequential Electrical Nerve Stimulation) is a sequence of two fixed impulse durations

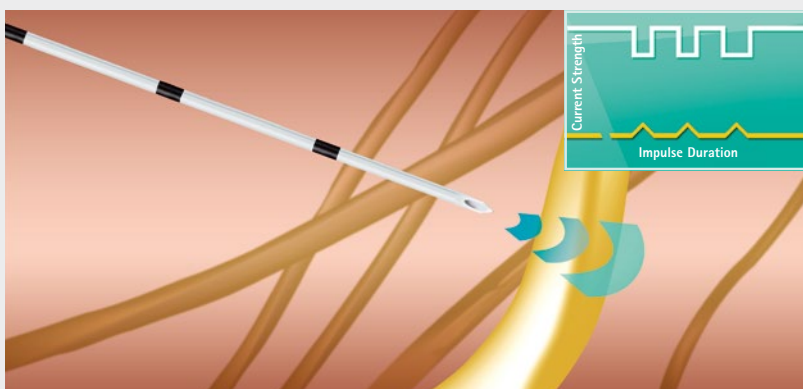
of 0.1 ms along with a third longer impulse duration. This results in getting the first muscle twitch already at a distance from the nerve and requires less adjustments to the amperage control, while maintaining the visual feedback.



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 toward 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 0.3 mA, not one but three muscle twitches are visible as all three impulses stimulate the nerve, thus SENSE allows easier and more reliable nerve localization for better blocks.

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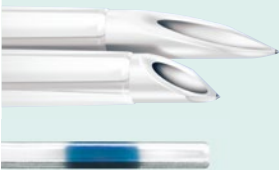
Product Specifications

Stimuplex® D	ø (G) and Length (inch)	ø and Length (mm)	Sales unit/Pcs.	Code No. (REF)
	Needles with 15° bevel			
	25 G x 1 1/3"	0.5 x 35 mm	25	4894103N
	25 G x 2 1/8"	0.5 x 55 mm	25	4894111N
	23 G x 1 1/2"	0.6 x 40 mm	25	4894120N
	23 G x 2 3/4"	0.6 x 70 mm	25	4894138N
	22 G x 2"	0.7 x 50 mm	25	4894146N
	22 G x 3 1/8"	0.7 x 80 mm	25	4894154N
	22 G x 4 3/4"	0.7 x 120 mm	25	4894162N
	20 G x 6"	0.9 x 150 mm	25	4894170N
	Needles with 30° bevel			
	22 G x 1 1/2"	0.7 x 40 mm	25	4894189N
	22 G x 2"	0.7 x 50 mm	25	4894197N
22 G x 3 1/8"	0.7 x 80 mm	25	4894200N	

Stimuplex® D Plus	ø (G) and Length (inch)	ø and Length (mm)	Sales unit/Pcs.	Code No. (REF)
	Needles with 15° bevel			
	25 G x 1 1/3"	0.5 x 35 mm	25	4894103U
	22 G x 2"	0.7 x 50 mm	25	4894146U
	22 G x 3 1/8"	0.7 x 80 mm	25	4894154U
	22 G x 4 3/4"	0.7 x 120 mm	25	4894162U
	Needles with 30° bevel			
	22 G x 2"	0.7 x 50 mm	25	4894197U

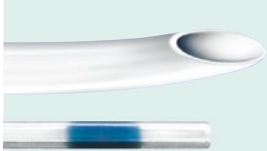
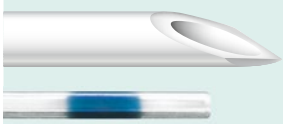

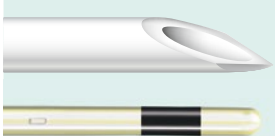
Stimuplex® A	ø (G) and Length (inch)	ø and Length (mm)	Sales unit/Pcs.	Code No. (REF)
	Needles with 30° bevel			
	24 G x 1"	0.55 x 25 mm	p.d. 31	4894251
	22 G x 1"	0.70 x 25 mm	25	4894539
	22 G x 1 1/8"	0.70 x 35 mm	25	4894367
	22 G x 2"	0.70 x 50 mm	p.d. 32.	4894502
	21 G x 2"	0.80 x 50 mm	25	4894375
	21 G x 4"	0.80 x 100 mm	p.d. 33.	4894260
	20 G x 6"	0.90 x 150 mm	25	4894278

Stimuplex® Ultra	ø (G) and Length (inch)	ø and Length (mm)	Sales unit/Pcs.	Code No. (REF)
	Needles with 30° bevel			
	22 G x 1 3/8"	0.70 x 35 mm	25	4894367U
	22 G x 2"	0.70 x 50 mm	25	4894502U
	22 G x 3 1/8"	0.70 x 80 mm	25	4894279U
	22 G x 4"	0.70 x 100 mm	25	4894260U
	20 G x 6"	0.90 x 150 mm	25	4894278U

Ultraplex®	ø (G) and Length (inch)	ø and Length (mm)	Sales unit/Pcs.	Code No. (REF)
	Needles with 30° bevel			
	22 G x 1 ³ / ₈ "	0.70 x 35 mm	25	4894001U
	22 G x 2"	0.70 x 50 mm	25	4894002U
	22 G x 3 ¹ / ₈ "	0.70 x 80 mm	25	4894003U
	20G x 4"	0.90 x 100 mm	25	4894004U
	20 G x 6"	0.90 x 150 mm	25	4894005U
Contiplex® C Sets	Description	Needle (OD x Length)	Sales unit/Pcs.	Code No. (REF)
	Contiplex® Catheter 1.10 x 0.60 x 188 mm			
	Extension tubing, 2.4 x 1.0 x 300 mm			
	25 G x 7 ¹ / ₂ ", 15° bevel	0.53 x 190 mm	5	4895000
Contiplex® D	Description	Needle (OD x Length)	Sales unit/Pcs.	Code No. (REF)
	Contiplex® D Needle			
	Contiplex® D, Needle with 15° bevel			
	18 G x 2 ¹ / ₈ "	1.3 x 55 mm	25	4894219N
	18 G x 3 ¹ / ₈ "	1.3 x 80 mm	25	4894296N
	18 G x 4 ³ / ₈ "	1.3 x 110 mm	25	4894294N
	Contiplex® D, Needle with 30° bevel			
	18 G x 2 ¹ / ₈ "	1.3 x 55 mm	25	4894227N
Contiplex® D Sets	Description	Needle (OD x Length)	Sales unit/Pcs.	Code No. (REF)
	Contiplex® D Sets			
	Contiplex® Catheter 0.41 x 0.71 x 400 mm			
	with Contiplex® D Needle 20 G x 1 ¹ / ₃ ", 15° bevel	1.1 x 33 mm	10	4892402N
	with Contiplex® D Needle 20 G x 2 ¹ / ₈ ", 15° bevel	1.1 x 55 mm	10	4892410N
	Contiplex® Catheter 0.45 x 0.85			
	with Contiplex® D Needle 18 G x 2 ¹ / ₈ ", 15° bevel	1.3 x 55 mm	10	4894235N
	with Contiplex® D Needle 18 G x 2 ¹ / ₈ ", 30° bevel	1.3 x 55 mm	10	4894243N
	Contiplex® Catheter 0.45 x 0.85 x 1000 mm			
	with Contiplex® D Needle 18 G x 3", 15° bevel	1.3 x 80 mm	10	4895819N
	with Contiplex® D Needle 18 G x 4 ³ / ₈ ", 15° bevel	1.3 x 110 mm	10	4894391N


B. Braun Peripheral Nerve Blocks

Product Specifications

Contiplex® Tuohy Sets	Description	Needle (OD x Length)	Sales unit/Pcs.	Code No. (REF)
	Contiplex® Tuohy Sets			
	Contiplex® Catheter 500mm, 18Gx1½"	1.3 x 40 mm	10	331695N
	Contiplex® Catheter 500mm, 18Gx2"	1.3 x 50 mm	10	331691N
	Contiplex® Catheter 500mm, 18Gx4"	1.3 x 100 mm	10	331693N
	Contiplex® Catheter 1000mm, 18Gx6"	1.3 x 150 mm	10	331694N
Contiplex® S Sets	Description	Needle (OD x Length)	Sales unit/Pcs.	Code No. (REF)
	Contiplex® S Sets			
	Contiplex® Catheter 500mm, 20°, 18Gx2"	1.3 x 50 mm	10	4898750
	Contiplex® Catheter 500mm, 20°, 18Gx4"	1.3 x 100 mm	10	4898752
	Contiplex® Catheter 1000mm, 20°, 18Gx6"	1.3 x 150 mm	10	4898754
Contiplex® Tuohy Ultra Sets	Description	Needle (OD x Length)	Sales unit/Pcs.	Code No. (REF)
	Contiplex® Ultra Catheter 0.45 x 0.85 x 400 mm, sideport adapter, connector, filter PinPad, syringe with cannula 18 G x 1½", 400 mm, isolated Tuohy type	1.3 x 40 mm	10	331695NC
	Contiplex® Ultra Catheter 0.45 x 0.85 x 400 mm, sideport adapter, connector, filter PinPad, syringe with cannula 18 G x 2", 400 mm, isolated Tuohy type	1.3 x 50 mm	10	331691NC
	Contiplex® Ultra Catheter 0.45 x 0.85 x 1000 mm, sideport adapter, connector, filter PinPad, syringe with cannula 18 G x 4", isolated Tuohy type	1.3 x 100 mm	10	331693NC
	Contiplex® Ultra Catheter 0.45 x 0.85 x 1000 mm, sideport adapter, connector, filter PinPad, syringe with cannula 18 G x 6", isolated Tuohy type	1.3 x 150 mm	10	331694NC
Contiplex® S Ultra Sets	Description	Needle (OD x Length)	Sales unit/Pcs.	Code No. (REF)
	Contiplex® Ultra Catheter 0.45 x 0.85 x 400 mm, sideport adapter, connector, filter PinPad, syringe 18 G x 2", 20° bevel	1.3 x 50 mm	10	4898750NC
	Contiplex® Ultra Catheter 0.45 x 0.85 x 1000 mm, sideport adapter, connector, filter PinPad, syringe 18 G x 4", 20° bevel	1.3 x 100 mm	10	4898752NC
	Contiplex® Ultra Catheter 0.45 x 0.85 x 1000 mm, sideport adapter, connector, filter PinPad, syringe 18 G x 6", 20° bevel	1.3 x 150 mm	10	4898754NC

Catheter gauge sizes according to EN ISO 9626

Plexufix®	Description	ø (G) and Length (inch)	ø and Length (mm)	Sales unit/Pcs.	Code No. (REF)
Needle for immobile needle technique according to Winnie	Needle with 45° bevel and extension tube 0.75 x 1.85 x 300 mm				
		24 G x 1"	0.55 x 25 mm	50	4891520
		24 G x 2"	0.55 x 50 mm	50	4891562
	Extension Tube for Plexufix® 0.75 x 1.85 x 230 mm, screwed			50	4891511

Nerve Stimulators	Description	Sales unit/Pcs.	Code No. (REF)
	Stimuplex® HNS 12 nerve stimulator for Stimuplex® and Contiplex® needles	1	4892098

Accessories	Description	Sales unit/Pcs.	Code No. (REF)
for peripheral nerve blocks	Stimuplex® Pen, device for percutaneous nerve mapping	1	4892099
	Electrode cable for Stimuplex® HNS 11/12, length 125 cm	1	4892070
	Electrode cable for Stimuplex® Dig RC, length 150 cm	1	4892917B
	Stimuplex® Remote Control for sterile one-hand operation	1	4892216B
	Knob for sterile handling	1	4892283
	Fingerrings for Stimuplex® Remote Control	1	4892224B
	Suitcase for Stimuplex® HNS 12	1	4892095
	Test resistance for Stimuplex® HNS 12	1	4892096
	Battery cover for Stimuplex® HNS 12	1	4892094