



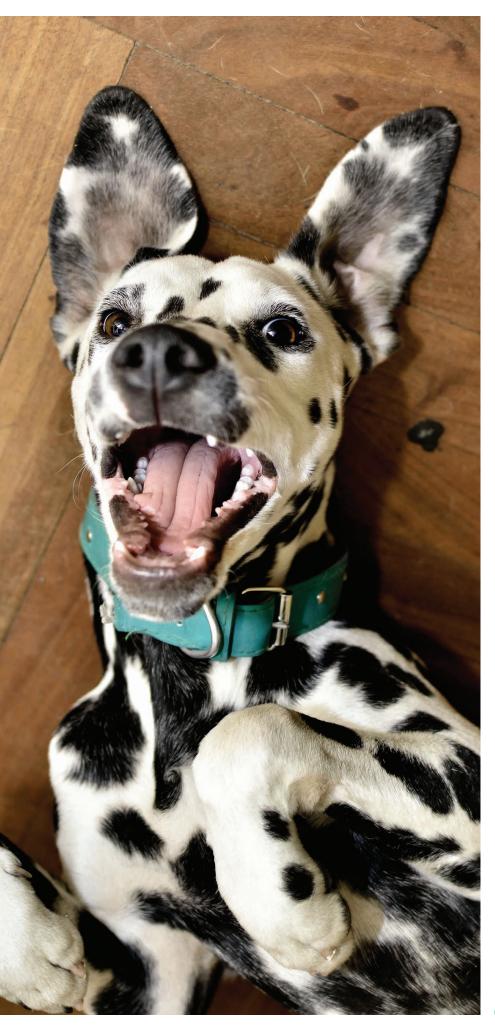




Working in collaboration with DMS Veterinary.

# B. Braun VetCare

Your Safety Partner in IV Therapy



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The Choice for Safer Infusion Therapy is yours...

REDUCING PLASTIC WASTE

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Caresite®: Clean, Clear Connection

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# B. Braun Company Profile

B. Braun VetCare is a member of the B. Braun Group, one of the world's leading manufacturers of medical devices and pharmaceutical products and services. With over 64,000 employees in 64 countries, B. Braun develops high quality product systems and services for users around the world.

This brochure concentrates on our IV Therapy range however, B. Braun offers veterinary practices and hospitals an outstanding portfolio of products for Infection Prevention, Infusion Therapy, Neurosurgery, Skin and Wound Management and Surgery. These are all matched by a comprehensive range of high quality services.

Every service provided by B. Braun incorporates the entirety of our knowledge and skills, the company's deep understanding of users' needs – and over 175 years of extensive expertise. With its constantly growing portfolio of effective medical care solutions, B. Braun makes a substantial contribution towards protecting and improving health.

In developing its products, product systems and services, B. Braun collaborates with it's partners through constructive dialogue, and with the motivation to improve and innovate, enabling solutions that are both evolving and progressive.

We offer an extensive range of innovative products that meet the highest quality standards, offering best value and improved clinical outcomes within the veterinary market place.



At B. Braun VetCare we care about the health and wellbeing of people in the Veterinary community, and to showcase this we are proud to support UK charity Vetlife.

#### **ABOUT VETLIFE**

Vetlife is an independent charity that provides free and confidential support to anyone in the UK veterinary community who has emotional, health or financial problems.

Vetlife fund and manage 3 support services in order to achieve this:



Today, the charity is providing more support than ever. 2018 was Vetlife helpline's busiest year, and in the last five years they have had an increase in calls and emails of over 500%.



# DMS Contact and Ordering Information



Website: www.dmsveterinary.com Email: sales@dmsveterinary.com

Telephone: 0333 9000 900

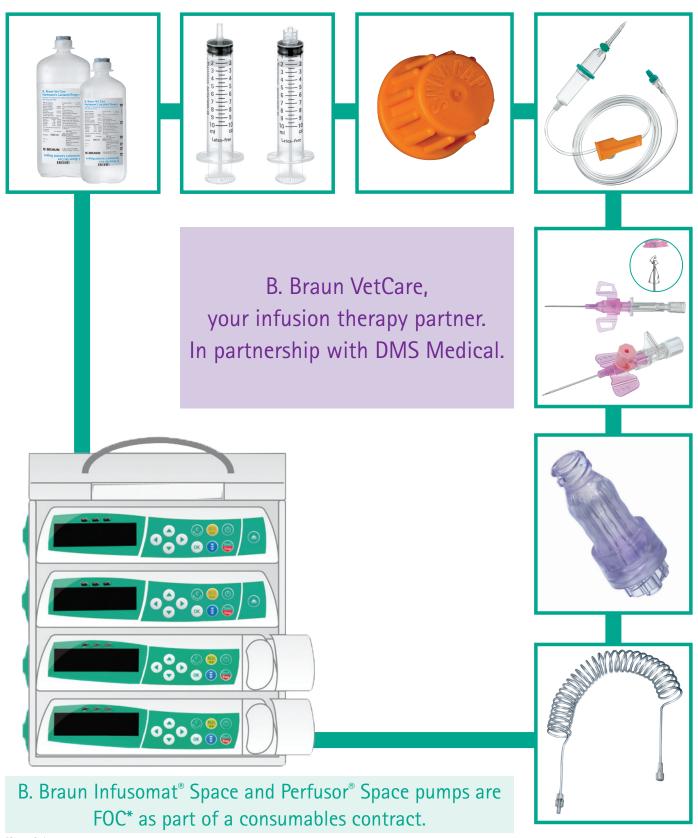
B. Braun VetCare, your infusion therapy partner. In partnership with DMS Medical.

- DMS deliver Monday to Saturday. An account can be set up via telephone 0333 9000 900
- Orders can be placed or altered by 4 pm for next day delivery. Place orders online at www.dmsveterinary.com or email orders to sales@dmsveterinary.com
- Direct delivery to customer shelves at no additional cost\*
- Delivery is free of charge
- DMS 'one account' loyalty point scheme in place

\*subject to order quantity



# The Choice for Infusion Therapy is Yours...



# Reducing Plastic Waste with Ecoflac® Plus



## 100% recyclable

Ecoflac® plus can be easily recycled, as no additives are added for the production of the container.



#### No toxic emissions

Ecoflac® Plus container is made of polyethylene which, like all hydrocarbons burns cleanly. When incinerated, the container biodegrades completely and residue–free into the natural elements of our environment, water (H<sub>2</sub>O) and carbon dioxide(CO<sub>2</sub>).

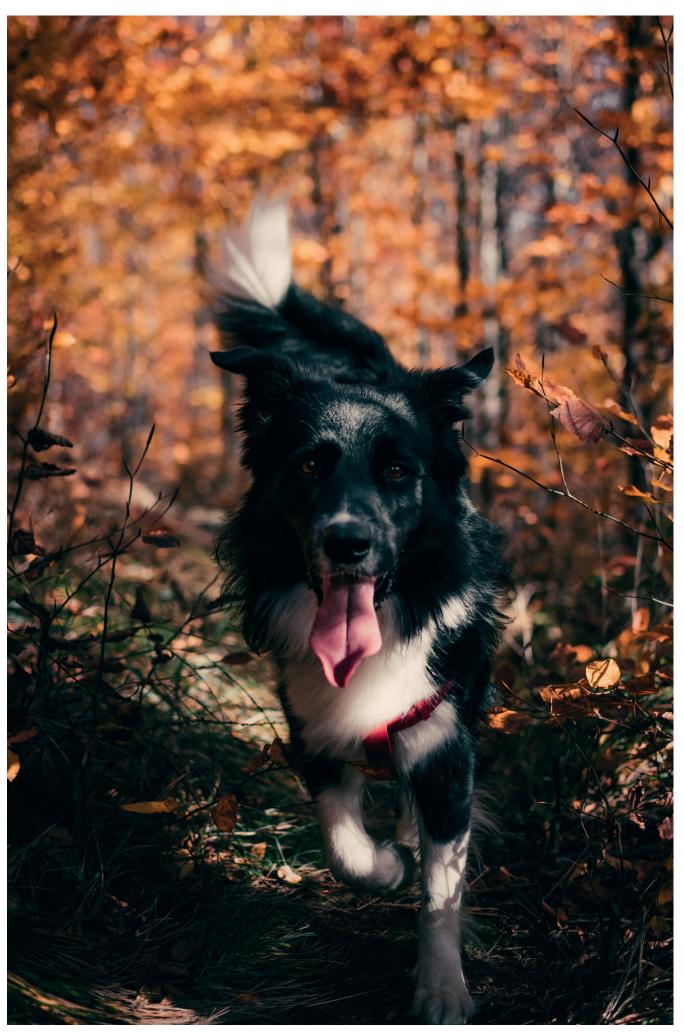


#### Low amount of waste

Unlike most flexible bags, Ecoflac® Plus containers have no outer packaging and thereby produce a lower amount of waste. It is also much lighter than glass containers.

#### **Environmental Benefits**

- Ecoflac® Plus 100% recyclable
- It is easy to dispose of and only produces a low amount of waste
- When incinerated, it only generates  $CO_2$  and  $H_2O$  no toxic emissions
- PVC, Latex and DEHP free



# Ecoflac® Plus

Looks Like a bottle. Acts Like a Bag



#### **BENEFITS**

Ecoflac® Plus combines the benefits of a bag and those of a bottle in a easy to handle container. This offers a clear label for reading and there is no need to vent.

#### **DISPOSAL**

Ecoflac® Plus is 100% recyclable and is made of polyethylene which burns cleanly. When incinerated, the container biodegrades completely, residue-free, into the natural elements of our environment, water and carbon dioxide.

#### **MATERIAL**

The Ecoflac® Plus container is free of PVC, DEHP and latex. It is made from low density polyethylene, a non-toxic and chemically inert material. This allows the addition of a wide range of pharmaceuticals.



#### ADDITIONS (TWINCAP)

Sealed with a protective aluminium cover. The Ecoflac® Plus container has two sterile ports which can be used for infusion and or drug additives. The latex free ports have a unique feature in that they reseal within seconds of removing the infusion/additive device, ensuring safety from spillages.



#### **HANDLING**

Ecoflac® Plus has the appearance of a bottle, but it is not breakable. It is virtually free of particulates and does not require venting for standard infusions (for advice on pressure infusions, please contact your B. Braun representative for further information). The Ecoflac® Plus containers are easy to count and store, either standing upright or laying on their side.

#### **LABEL**

Unlike a bag, the unique design of Ecoflac® Plus allows the container to collapse in on itself during infusion, ensuring the label remains legible at all times. Scale markings appear down one side of the label, accurately showing the delivered volume, taking into account the collapsibility of the container during the infusion.



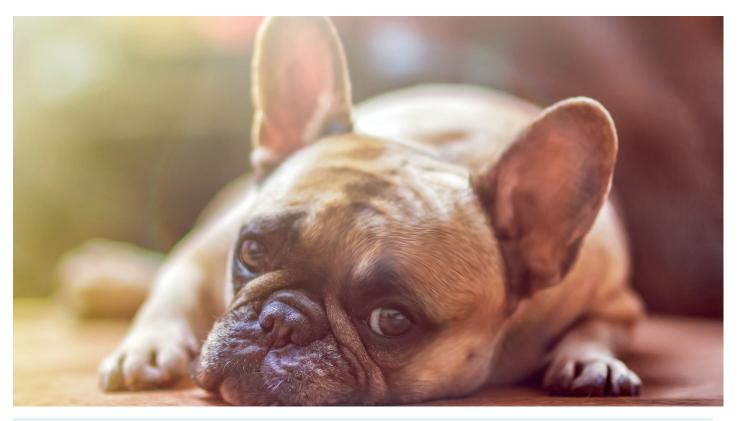




#### SIZE

The Ecoflac® Plus container is available in a number of sizes, including: 1000 ml, 500 ml, 250 ml, 100 ml and 50 ml.

# **Solutions**



#### B. Braun Vet Care Hartmann's Lactated Ringers

Solution for infusion for cattle, horses, sheep, goats, pigs, dogs and cats

#### Characteristics: Balanced Electrolyte Solution

#### 100 ml Solution contains:

#### Active substances:

Sodium chloride 0.600 g Potassium chloride 0.040 g Calcium chloride dihydrate 0.027 g Sodium (S)-lactat 0.312 g

(as sodium lactate solution (50 % w/v) 0.624 g)

#### Electrolyte concentrations (mmol/l):

Sodium 130.49 Potassium 5.37 Calcium 1.84 Chloride 111.70 Lactate 27.84

#### Theoretical osmolarity:

277 mOsm/l
Titration acidity <1 mmol/l
pH 5.0–7.0
Excipient:
Water for injection, q. s.

Container	Size	B. Braun Code	Quantity
Ecoflac® plus	500 ml	3574070	10
Ecoflac® plus	1000 ml	3574071	10



**User Benefits** 

Volume and electrolyte replacement

 Treatment of mild to moderate acidosis; stabilisation of blood-pH

#### Sodium Chloride 0.9 q/100 ml B. Braun Vet Care

Solution for infusion for cattle, horses, sheep, goats, pigs, dogs and cats

#### Characteristics: Electrolyte Solution, Carrier Solution

#### 100 ml Solution contains:

Active substances:

Sodium chloride 0.9 g

Excipient:

Water for injections

Electrolyte concentrations (mmol/l):

Sodium 154 Chloride 154 Theoretical osmolarity:

308 m0sm/l

pH value: 4,5 - 7,0

Container	Size	B. Braun Code	Quantity
Ecoflac® plus	500 ml	3574190	10
Ecoflac® plus	1000 ml	3574200	10



User Benefits

- For internal and external use
- Treatment in cases of hypovolaemic shock
- Mixing with many electrolyte solutions and pharmaceuticals

#### Glucose 5 g/100 ml B. Braun Vet Care

Solution for infusion for cattle, horses, sheep, goats, pigs, dogs and cats

#### Characteristics: Carbohydrate Solution, Carrier Solution

#### 100 ml Solution contains:

**Active substances:** 

Glucose monohydrate 5.5 g

(equivalent to anhydrous glucose 5.0 g)

Excipient:

Water for injections

Caloric value 837 kJ/l = 200 kcal/l

Theoretical osmolarity:

278 m0sm/l

pH value 3.5 - 5.5Water for injection,

q. s.

Container	Size	B. Braun Code	Quantity
Ecoplus	500 ml	3574140	10

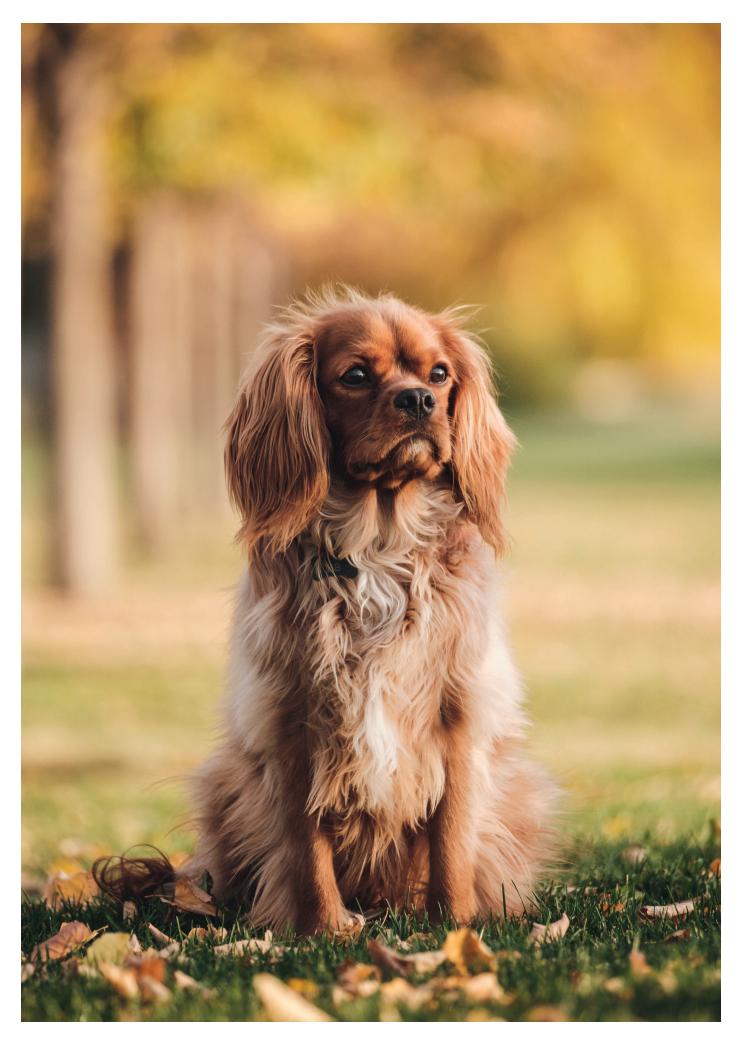


**User Benefits** 

- Therapy of hypertonic dehydration
- Provides free water for the extra and intracellular space
- Partial coverage of energy requirements
- Correction of certain electrolyte imbalances

# **Solutions Overview**

Туре	Balanced Electrolyte Solution	Carbohydrate Solution	
Product	0.9% NaCl <sup>-</sup> Solution	Hartman's Lactated Ringers	Glucose 5%
	Nacional de la constanta de la	B. Brown Vet Clary Hartenson's Lectured Ringer Hartenson's	Month of these did with only the control of the con
Na+ (mmol/l)	154	130.49	-
K+ (mmol/I)	-	5.37	-
Ca <sup>++</sup> (mmol/l)	-	1.84	-
Mg <sup>++</sup> (mmol/l)	-	-	-
Cl <sup>-</sup> (mmol/l)	154	111.70	-
Phosphate (mmol/l)	-	-	-
Buffer (mmol/l)	-	Lactate 27.84	-
Glucose (g/l) (anhydrous)	-	-	50.0
kJ/I	-	-	837
kcal/l	-	-	200
Theor. Osmolarity (mOsm/l)	308	277	278
500 ml	<b>✓</b>	<b>✓</b>	<b>✓</b>
1000 ml	✓	<b>✓</b>	-



# Reduce waste and save time with Aesculap® container systems

The Aesculap® container is a rigid sterile barrier system, ensuring surgical instrumentation is provided to the surgeon in an aseptic presentation.

#### **SOLUTION**

Aesculap® Sterile Containers are an innovative, modern and sustainable solution that enables hospitals to adopt leaner processes, whilst reducing clinical waste and the ecological footprint created from the use of disposable products.

Offering a validated system, conforming to the current DIN EN ISO standards for packaging sterilised medical devices, Aesculap® Sterile Containers ensure the contents remain sterile and free from contamination, for a period of up to 365 days.

#### VET COST SAVING EXAMPLE

KIT NAME	USES PER WEEK	CURRENT PACKING CYCLE	COST PER CYCLE	COSTS PER WEEK	COSTS PER YEAR	COST PER CYCLE	COST PER WEEK	COST PER YEAR		
			WRAPS				CONTAINERS			
Ortho Kit	20	1 drape and 2 bags	£2.06	£41.20	£2,060.00	£0.56	£11.20	£560.00		
Mini Driver Kit	15	1 drape and 2 bags	£2.48	£37.20	£1,860.00	£0.56	£8.40	£420.00		
					£3,920.00			£980.00		

#### **COST SAVING MODEL**

	CONTAINERS	CONSUMABLES	TOTAL COST FOR USING CONTAINERS	WRAP	WRAP DISPOSAL	TOTAL	SAVINGS
YEAR	COST		TOTAL COST	COST	COST (Clinical waste disposal will vary for each practice)		
1	£3,875.82	£980.00	£4,855.82	£3,920.00	£	£3,920.00	£935.82 PER YEAR
2		£980.00	£5,835.82	£3,920.00	£	£7,840.00	
3		£980.00	£6,815.82	£3,920.00	£	£11,760.00	
4		£980.00	£7,795.82	£3,920.00	£	£15,680.00	
5		£980.00	£8,775.82	£3,920.00	£	£19,600.00	
6		£980.00	£9,755.82	£3,920.00	£	£23,520.00	
7		£980.00	£10,735.82	£3,920.00	£	£27,440.00	
8		£980.00	£11,715.82	£3,920.00	£	£31,360.00	
9		£980.00	£12,695.82	£3,920.00	£	£35,280.00	
10 year total	£3,875.82	£8,820.00	£13,675.82	£35,280.00	£	£39,200.00	£25,524.18



OUR CONTAINER SYSTEMS FIT IN BENCH TOP AUTOCLAVES

# **CONTAINER HIGHLIGHTS**











No wrap or bags needed, so reduction in waste and cost







# **Veterinary Sterile Containers**

#### The Expert for Veterinary Clinics

#### **FILTER**



JK091

**Permanent filter,** 1000 cleaning and sterilisation cycles

Pack of 2



#### JF166

Single use paper filter Pack of 100



#### **IDENTIFICATION LABEL**

red - JG645B blue - JG646B green - JG647B

gold - JG648B

black - JG650B olive-brown - JG652B

violet - JG653B orange - JG654B

#### INDICATOR LABEL

JG687 Pack size 100

# STERILE CONTAINER COMPLETE (LID WITH BASE, WITHOUT INSTRUMENT TRAY)

#### JN092

Outside dim. 313 x 190 x 46 mm



#### **INSTRUMENT TRAYS**

#### JG383R

Instrument tray with lid handle, contains 3 instrument racks (JG391) outside dim. 273 x 176 x 30 mm



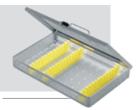
#### IN094

Outside dim. 313 x 190 x 65 mm



#### JG384R

Instrument tray with lid handle, contains 3 instrument racks (JG393) outside dim. 273 x 176 x 41 mm



#### JN095

Outside dim.  $313 \times 190 \times 92 \text{ mm}$ 



#### JG285R

Instrument tray with lid, outside dim. 273 x 176 x 60 mm



#### JN096

Outside dim. 313 x 190 x 130 mm



#### JF289R

JF2882R

Lid Instrument tray outside dim. 273 x 176 x 100 mm



#### **CUT-TO-SIZE SILICONE MATS**

#### JF945

Silicone positioning mat with perforation



#### JF938

Silicone mesh mat





#### **ADVANTAGES:**

- Continuous annular silicone lid seals allow germ-proof closure of the container
- The locking levers double as lid handles
- Integrated springs cause consistent sealing of the sterile container
- Sterile containers can be stacked for spacesaving in the sterile supplies cycle

 Quick-release filter holder for quick and easy replacement of Aesculap® sterile filters Veterinary sterile containers are especially suited for the provision of sterile supplies in veterinary clinics and fit into all common mini sterilisers.

Veterinary sterile containers are not suitable for hot-air sterilisation!



# Mini Sterile Containers

#### For Small Sets and Small Instruments

#### **FILTER**





Permanent filter, 1000 cleaning and sterilisation cycles

Pack of 2



Single use paper filter Pack of 100



red - JG645B blue - JG646B green – JG647B gold - JG648B

black - JG650B olive-brown - JG652B

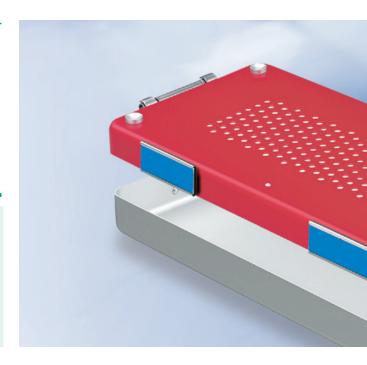
violet - JG653B orange - JG654B



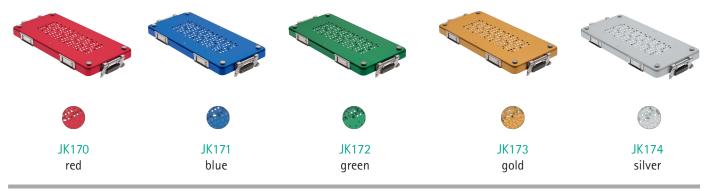
#### INDICATOR LABEL

JG687 Pack size 100





#### LID



# STERILE CONTAINER BASES JN188 Height 57 mm (Sterile container base with lid, outside dim. 310 x 140 x 67 mm)

with base perforation





#### **ADVANTAGES:**

- Mini sterile containers with easy-touse locking levers
- Specially designed for small sets

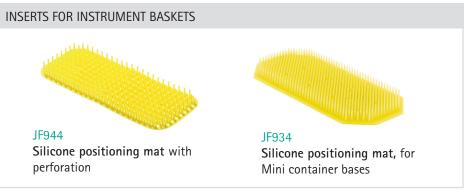
Mini sterile containers were specially developed for small sets (e.g. smallwound treatment) and small, delicate instruments, especially for microsurgery. Mini sterile containers are not suitable for hot-air sterilisation!





#### JF436R

Tray for arthroscope of Ø 2,7 mm or 4 mm diameter and sheath length 140 - 200 mm, outside dim. 273 x 84 x 41 mm



# Customer Testimonial Anderson Moores







Anderson Moores Veterinary Specialists have invested in 15 syringe drivers and 45 intravenous fluid pumps from B. Braun Medical Ltd through a newly formed partnership with DMS Veterinary.

The Space Infusion pumps are small, lightweight and have multiple safety features. They stack neatly for charging, clipping together so that in our situation where we have many pumps, we don't need to have as many leads trailing to sockets. They have a long battery life and are easy to clip off the rail on the kennel and return to the charging stack every 8–12 hours.

Safety features include detection of air in the line and safety programmes to ensure that incorrect rates cannot be accidentally administered for critical drugs. We have pre-set a drug library to calculate continuous rate infusions at patient-side, helping to reduce the risk of human error in calculations.

The pump system has numerous safety features helping to prevent errors and making flow rate calculations automatically. Boluses are easily administered with a one touch process and automatically stop with no need to watch them. Dedicated giving sets ensure that free flow after disconnection is prevented and the bag spike can be protected for safe disposal.

Sales representatives from B. Braun Medical Ltd visited us for the best part of a week to provide on-site training for all of our staff including the night and twilight teams and we are delighted to see these pumps installed into our practice. They are already proving to be reliable and easy to use.

Davina Anderson Anderson Moores Veterinary Specialist

# Infusomat® Space and Perfusor® Space

## Setting the standard together

#### Modular System



- Using the space stations as a storage dock means pumps are securely stored and charging
- 24 infusion devices can be charged from one power cable. This is achieved by stacking 6 space stations together, meaning less plug sockets needed in pump storage areas
- 3 infusion devices can be locked together onto a pole clamp. This means that kennel fronts and surgical drip stands are less cluttered as devices lock neatly together

#### **Battery and Charging**



- Up to 16 hour battery life, meaning less power cables in hospital areas causing health and safety concern
- 2 or 3 infusion devices can charge off one power cable when being used outside of a space station by using the combi cable
- Same battery used for both devices. Removable, exchangeable and replaceable battery

#### Drug Error Reduction Software (DERS) and Drug Library



- Drug library is written by you to ensure it is specific to your needs, this is then uploaded onto the devices
- The drug library will help reduce infusion errors by utilising the soft (can be breached) and hard limits (can't be breached) for each drug
- Weight based dose calculations and fixed dosing regimes (dose over time) can be pre-programmed to minimise drug errors

#### MRI Compatible Unit



- Same pump/syringe driver as the rest of the hospital means people are familiar with how to use it
- Assists access to vital MRI investigations
- No need to exchange or remove a patients pump prior to scanning
- Reduce medication interruptions or disconnections
- Helps to prevent scan interference from pumps
- Optimal positioning of pumps with the MRI room
- No requirement for expensive dedicated MRI pump
- Standard length infusion lines can be used
- Docking space for up to four Space syringe or volumetric infusion pumps

#### Training and Support



- Full onsite training for all staff on how to use the devices
- Dedicated workshop in Sheffield for all repairs and servicing with highly skilled technicians
- Full back up and long term support enabling drug library changes
- Purpose designed, centrally located, UK Technical Service Facility
- Highly skilled and experienced electromedical engineers dedicated to providing excellent repair and maintenance services
- Regular technical product training and refresher sessions
- Prompt and reliable spare parts supply

#### **General Benefits**

- Easy handling with small, lightweight modular pumps
- Standardised user interface meaning increase of staff familiarity with both the infusion pump and syringe driver.
   This will increase user compliance and help to increase patient safety

# Infusomat® Space Basic Sets

## Delivering value in infusion therapy

#### Drip Chamber DC2000

- Easy to spike
- Helps to eliminate venting needle costs and contamination risk
- Easy to fill

#### Soft, Flexible Tubing

- Silicon segment with 96h accuracy
- PVC DEHP-free
- PVC-free low sorption made of Neutrapur®

#### Orange Roller Clamp

- Comfortable to handle
- Easier to roll
- Tube dock for convenient line fixation

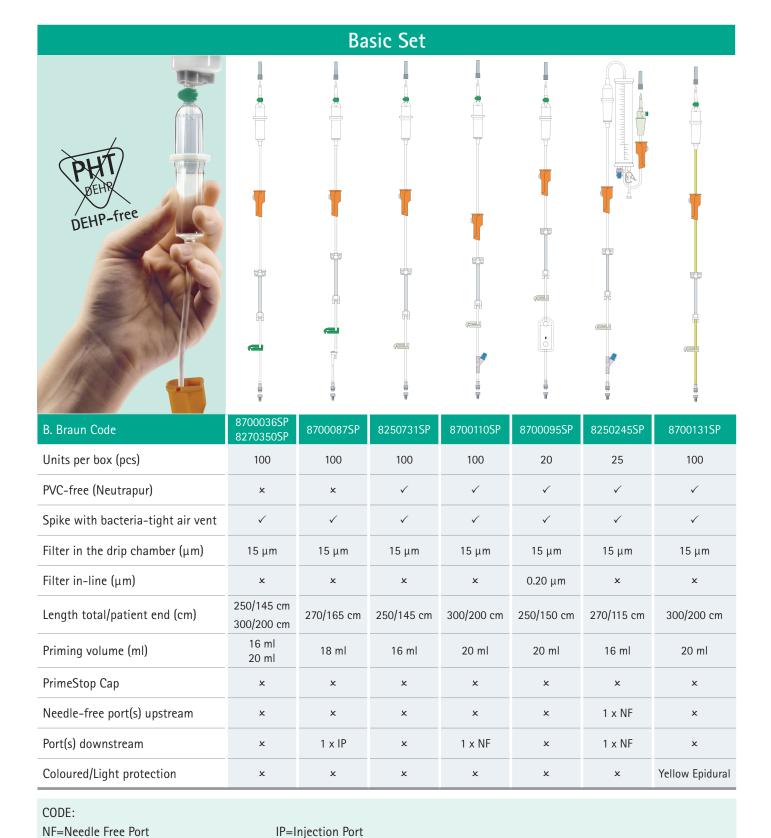






Infusomat® Space Lines	Sales Unit	B. Braun Code	Filter Size	Clinical Applications	Alternatives
Basic PVC, (DEHP Free)	100	8700036SP	15 μm	Infusion of drugs, fluids and parenteral solutions having no particular filtration requirement and compatible with PVC	8701148SP
Basic PVC, Extra Long Line (300 cm), (DEHP Free)	100	8270350SP	15 μm	Infusion of drugs, fluids and parenteral solutions having no particular filtration requirement and compatible with PVC	8270358SP
Basic PVC with Eurofix Injection Port, (DEHP Free)	100	8700087SP	15 μm	Infusion of drugs, fluids and parenteral solutions having no particular filtration requirement and compatible with PVC	8700130SP 8700118SP 8250438SP
Basic Neutrapur, (PVC-free)	100	8250731SP	15 μm	Infusion of drugs, fluids and parenteral solutions having no particular filtration requirements, that requires low sorption or PVC-free administration sets	8701149SP
Basic Neutrapur NF x1, (PVC-free)	100	8700110SP	15 μm	Infusion of drugs, fluids and parenteral solutions having no particular filtration requirements, that requires low sorption or PVC-free administration sets	8700118SP 8250438SP
Basic Neutrapur, 150 ml Burette set with NF, (PVC-free)	25	8250245SP	15 µm	Infusion of drugs, fluids and parenteral solutions having no particular filtration requirement	N/A
Basic Neutrapur, 0.2 μm filter, for Taxol, (PVC-free)	20	8700095SP	0.2 μm	Infusion of drugs and fluids that requires filtration with a 0.2 micron filter (e.g. Taxol, Paclitaxel)	8700098SP 8251284SP
Basic Neutrapur Epidural, Yellow, LuerLock, 300 cm, (PVC-free)	100	8700131SP	15 μm	Epidural infusions	N/A

#### Administration sets for Infusomat® Space

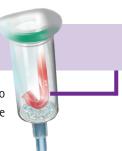


# Infusomat® Space SafeSet

## The Smart Protection in Infusion Therapy

#### AirStop

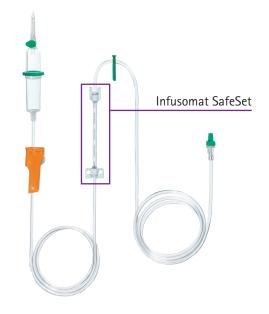
An airtight filter membrane acts as a barrier, helping to protect against air infusion while retaining particulate matter.



# PrimeStop

A protective cap lined with a hydrophobic membrane stops fluid leaking and helps protect against contamination.





Infusomat <sup>®</sup> Space SafeSet Lines	Sales Unit	B. Braun Code	Filter Size	Clinical Applications	Alternatives
SafeSet PVC, (DEHP Free)	100	8701148SP	15 μm	Infusion of drugs, fluids and parenteral solutions having no particular filtration requirement and compatible with PVC	8701149SP 8700128SP
SafeSet PVC, Extra Long Line (300 cm), (DEHP Free)	100	8270358SP	15 μm	Infusion of drugs, fluids and parenteral solutions having no particular filtration requirement and compatible with PVC	8700118SP
SafeSet Neutrapur, (PVC-free)	100	8701149SP	15 μm	Infusion of drugs, fluids and parenteral solutions having no particular filtration requirements, that requires low sorption or PVC-free administration sets	8700118SP 8700128SP
SafeSet PVC, (DEHP Free)	100	8700130SP	15 µm	Infusion of drugs, fluids and parenteral solutions having no particular filtration requirement and compatible with PVC	8700118SP
SafeSet Neutrapur, NFx1, (PVC-free)	100	8700118SP	15 μm	Infusion of drugs, fluids and parenteral solutions having no particular filtration requirements, that requires low sorption or PVC-free administration sets	8250718SP 8250438SP
SafeSet Neutrapur, Piggyback, BCV, NFx2, (PVC-free)	25	8250718SP	15 μm	Infusion of drugs, fluids and parenteral solutions having no particular filtration requirements, that requires low sorption or PVC-free administration sets	N/A
SafeSet Neutrapur, NFx3, (PVC-free)	50	4183189SP	15 μm	Infusion of drugs, fluids and parenteral solutions having no particular filtration requirements, that requires low sorption or PVC-free administration sets	N/A
SafeSet Neutrapur, 0.2micron filter, for Taxol, (PVC-free)	20	8700098SP	0.2 μm	Infusion of drugs and fluids that requires filtration with a 0.2micron filter (e.g. Taxol, Paclitaxel)	8251284SP
SafeSet Neutrapur, 0.2micron filter, for Taxol, NFx1, (PVC-free)	50	8251284SP	0.2 μm	Infusion of drugs and fluids that requires filtration with a 0.2micron filter (e.g. Taxol, Paclitaxel)	N/A
SafeSet Neutrapur Orange Opaque, (PVC-free)	100	8700128SP	15 μm	Infusion of light sensitive drugs, fluids and parenteral solutions having no particular filtration requirements (e.g. Multivitamin solution, Dacarbazine)	8250438SP
SafeSet Neutrapur Orange Opaque, NF x 1, (PVC-free)	100	8250438SP	15 μm	Infusion of light sensitive drugs, fluids and parenteral solutions having no particular filtration requirements (e.g. Multivitamin solution, Dacarbazine)	N/A

#### Administration sets for Infusomat® Space



# Intrafix® SafeSet IV Administration Set

#### The Intelligent Choice

Thanks to the quality of our AirStop feature, B. Braun Intrafix® SafeSet will continue to run as reliably and consistently as it did on the first infusion without air entering the line. All of the sets are now DEHP free.

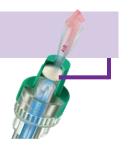
#### AirStop

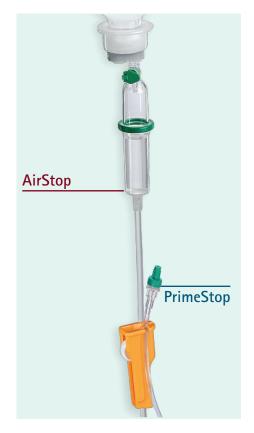
An airtight filter membrane acts as a barrier, protecting against air infusion while retaining particulate matter.



#### PrimeStop

A protective cap lined with a hydrophobic membrane stops fluid leaking and helps protect against contamination.

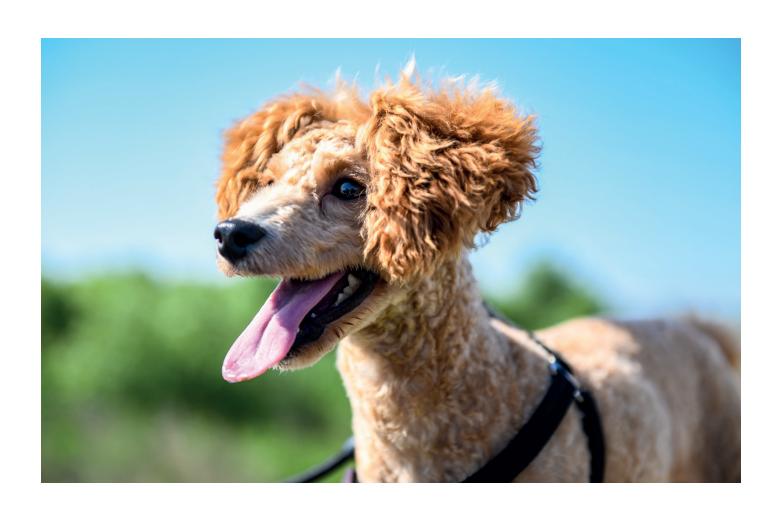




#### **User Benefits**

- Time saving
  - No need to reprime the set if air enters the line
  - Helps to reduce your work time
- Cost saving less sets used due to air stop
  - No air in line so a new set is not required
  - Helps to reduce your work time
- Patient safety
  - Helps to prevent air embolism and infusion related infections
- Staff safety
  - Helps to reduce fluid spills and needlestick injuries (Air Inlet)





Product	Specification	B. Braun Code
Intrafix® SafeSet	Gravity set with AirStop and PrimeStop	4063000
Intrafix® SafeSet	Gravity set with AirStop and PrimeStop Longer Length (230 cm)	4063003
Intrafix® SafeSet with Backcheck Valve	Gravity set with Backcheck Valve, AirStop and PrimeStop	4063001
Intrafix® SafeSet PVC free	PVC free gravity set with AirStop and PrimeStop	4063002
Intrafix® SafeSet with Y site Needlefree Valve	Y site gravity set with Needlefree Valve, AirStop and PrimeStop	4063004
Intrafix® SafeSet Y site	Y site gravity set with AirStop and PrimeStop	4063005

# **Extension Lines**

B. Braun's range of Original Perfusor Lines with integrated slide clamp is a cost effective range of extension lines designed to enhance patient safety during IV Therapy.



#### Flexibility

The Original Perfusor Line is available in two lengths to suit individual requirements.

#### Slide Clamp

The pre-attached non-removable slide clamp reduces the risk of free flow and leakage during administration preparation.

#### **Easy Storage**

Supplied in boxes of 25 making for easy and convenient storage.

#### Low Priming Volume

The Original Perfusor Line with integrated slide clamp has priming volumes of just 1 ml and 1.3 ml, which helps to reduce costly drug wastage.

#### Pressure Resistance

Pressure resistant up to 2.0 bar (29 psi).

Original Perfusor Extension Line with Integrated Slide Clamps	Length (cm)	Priming Volume (ml)	lnner ø	Material	Quantity per Box	B. Braun Code
	150	1.0	0.9	PVC (DEHP-free)	25	8722940
7	200	1.3	0.9	PVC (DEHP-free)	25	8722941

#### More mobility for your patients

Early mobilisation effectively promotes healing. Today's mobile patients need flexible solutions to keep their infusions running.

With our wide range of extension lines, B. Braun help to improve patient mobility.



Spiral-Tubings	Length (cm)	Priming Volume (ml)	Inner ø	Material	Quantity per Box	B. Braun Code
	150	2.3	1.0	PUR	50	4092937
	150	4.7	2.0	PUR	50	4090365
	300	1.2	1.0	PUR	50	4092945
	300	9.4	2.0	PUR	50	4090373

Perfusor® Lines	Length (cm)	Priming Volume (ml)	Inner ø	Material	Quantity per Box	B. Braun Code
	50	0.9	1.5	PVC (DEHP-free)	100	8255172
_	150	2.6	1.5	PVC (DEHP-free)	100	8722960
_	200	3.5	1.5	PVC (DEHP-free)	100	8722862
	250	4.4	1.5	PVC (DEHP-free)	100	8255490
	300	5.3	1.5	PVC (DEHP-free)	100	8255253
	50	0.4	1.0	PE	100	8255059
	100	0.8	1.0	PE	100	8255067
-	150	1.2	1.0	PE	100	8722935
	200	1.6	1.0	PE	100	8723060
	250	2.0	1.0	PE	100	8272565

Extension Line Type Heidelberger	Length (cm)	Priming Volume (ml)	Inner ø	Material	Quantity per Box	B. Braun Code
	75	5.3	3.0	PVC (DEHP-free)	100	4097173
	100	7.1	3.0	PVC (DEHP-free)	100	4097262
	140	9.9	3.0	PVC (DEHP-free)	100	4097408
	320	22.6	3.0	PVC (DEHP-free)	100	4097130

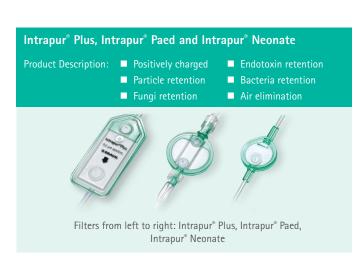
# **Filters**

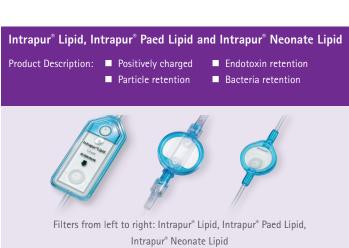
All in-line filters also function as early warning systems, alerting you to drug incompatibilities in the infusion regimen.

Filters with a pore size of 0.2  $\mu\text{m}$ , like those used for crystalloid infusion solutions, can be used for the majority of drugs.

Lipids and emulsions should be run through filters with 1.2  $\mu\text{m}$  membrane.







		Pore size	Filtration area (cm²)	Flow rate (aqua dist., ml/ min)	Filling Volume			Max.			
Pr	Product				Filter housing (ml)	Total incl. tubing (ml)	Tubing diameter	operation pressure of filter housing	Time of use recommended	Quantity per box	B. Braun Code
	Intrapur® Plus	0.2 μm	10	> 30	2.4	3.46	PVC* 2 x 4.1	3.1	96 h	50	4099800
	Intrapur® Paed	0.2 μm	4.5	> 10	0.7	1.19	PVC* 1.2 x 2.2	3.1	96 h	50	4099753
	Intrapur® Neonat	0.2 μm	1.65	> 2	0.4	0.76	PUR 1 x 2.35	5.2	96 h	50	4099451
	Intrapur® Lipid	1.2 μm	10	> 100	2.4	3.46	PVC* 2 x 4.1	3.1	24 h	50	4099702
	Intrapur® Paed Lipid	1.2 μm	4.5	> 90	0.7	1.19	PVC* 1.2 x 2.2	3.1	24 h	50	4099850
	Intrapur® Neonat Lipid	1.2 μm	1.65	> 30	0.4	0.76	PUR 1 x 2.35	5.2	24 h	50	4099460



#### User Benefits of IV Filters

- Less complications
- Direction of incompatibilities
- Protection from air embolism
- Potential cost saving
- Retains particles and bacteria

# Sterifix® and Sterifix® Paed Product Description: Air elimination Particle retention Fungi retention Bacteria retention

Filters from left to right: Sterifix® & Sterifix® Paed

Product	Pore size	Filtration area (cm²)	Flow rate (aqua dist., ml/ min)	Filter	y Volume Total incl. tubing (ml)	Tubing diameter	Max. operation pressure of filter housing	Time of use recommended	Quantity per box	B. Braun Code
Sterifix®	0.2 μm	10	> 30	2.4	3.46	PVC* 2 x 4.1	3.1	24 h	50	4099303
Sterifix <sup>®</sup>	0.2 μm	10	> 30	2.4	4.54	PUR 3 x 4.1	3.1	24 h	50	4184637
Sterifix® Paed	0.2 μm	4.5	> 10	0.7	0.7	no tubing	3.1	24 h	50	4099354

\*PVC (DEHP-free)

Injection and Aspiration Filters	Particle retention	Bacteria retention	Special features	Pore size (µm)	Quantity per Box	B. Braun Code
Sterifix® injection filter	YES	YES	Suitable as syringe-filter	0.2	50	4099206

# Introcan Safety®

#### Simplicity and Safety at your fingertips

#### Introduction

B. Braun Medical's range of peripheral IV safety cannulae allow for the conversion to safety IVCs for all clinical areas and applications. B. Braun Medical's safety IVC product range uses identical safety clip technology across the product variants of Introcan Safety® 3, Introcan Safety® and Vasofix® Safety providing staff with product familiarity. This allows you to standardise to one supplier with products designed to meet the needs of your clinical area.

#### **Needlestick Injuries**

The Health Protection Agency (HPA) has reported that there are an estimated 100,000 needlestick injuries (NSIs) every year in the UK.

#### History of IV Cannula

- B. Braun Medical Ltd introduced the very first one piece plastic IV cannula known as the 'Braunule' in 1962. The name was anglicised for the UK market to 'Braunula'.
- B. Braun has combined knowledge from several decades of experience in peripheral cannulation to create the UK IVC market leading Introcan Safety® 3 and Introcan Safety® non-ported cannula and Vasofix® Safety ported cannula to protect veterinary workers from accidental needlestick injuries and patients from IV related infections.

#### **User Benefits**

- Simplicity Looks and feels like a standard cannula
- Secure safety mechanism Cannot be interfered with prior to cannulation
- Full range All sizes, non ported, closed non ported and ported safety cannulae available in Polyurethane (PUR) or Teflon (FEP) and as part of a Safety IV Cannulation Pack
- Material choice
  - PUR, advanced softening within the vein
  - FEP, traditional insertion characteristics with modern technology
- Environmentally friendly Less sharps bin waste compared to competitor
   Safety IVCs\*. B. Braun packaging is fully recyclable
- Suitable for use with powered injectors for CT scanning Refer to Introcan Safety® 3 and Introcan Safety® instructions for use
- \* Please ask your Key Account Manager for further details.





# Introcan Safety® Closed IV Catheter



#### Push Plate

- Facilitates one-handed catheter advancement
- Minimises incidence of catheter hub touch contamination
- Indicates needle bevel orientation

#### Flashback Chamber

- Transparent flashback chamber allows quick visualisation of blood
- Rapid confirmation of vein access



 Permits attachment of a syringe for aspiration or other specialised procedures



# Product Specifications Introcan Safety®

Introd	can Safety		Cannula	Straight or Wing	Gravity Flow Rate ml/min	FEP	PUR	B. Braun Code
Cannu	la Size (G)	Length/inch	ø/mm	Straight or wing	Gravity Flow Nate IIII/IIIII	FEF	run	b. Draun Code
	24	3/4	0.7 x 19	W	22			4253523-01
	24	3/4	0.7 x 19	W	22			4254503-01
	24	3/4	0.7 x 19	S	22			4251601-01
	24	3/4	0.7 x 19	S	22			4252500-01
	22	1	0.9 x 25	W	35			4253540-01
	22	1	0.9 x 25	W	35			4254511-01
	22	1	0.9 x 25	S	35			4251628-01
	20	1 1/4	1.1 x 32	W	60			4253566-01
	20	1 1/4	1.1 x 32	W	60			4254538-01
	20	1 1/4	1.1 x 32	S	60			4251644-01
	18	1 3/4	1.3 x 45	W	100			4253590-01
	18	1 3/4	1.3 x 45	W	100			4254554-01
	18	1 3/4	1.3 x 45	S	100			4251679-01
	16	2	1.7 x 50	W	210			4253612-01
	16	2	1.7 x 50	W	210			4254570-01
	16	2	1.7 x 50	S	210			4251695-01
	14	2	2.2 x 50	W	345			4253639-01
	14	2	2.2 x 50	W	345			4254597-01
	14	2	2.2 x 50	S	345		•	4251717-01

# Introcan Safety® 3 Closed IV Cannula

# Simplicity and Safety at your fingertips

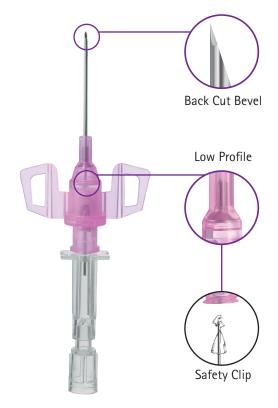
## The Evolution of Safety

With your patients and you in mind, Introcan Safety® 3 has been designed to protect you against accidental needlestick injuries and IV related infections.

Introcan Safety® 3 eliminates the use of an injection port to gain IV access to the patient. Common complications resulting in infection and acquiring blood borne disease can be a result of contamination through entry of the cannula hub¹.

Introcan Safety® 3 is a closed IV cannula promoting aseptic practice to reduce the risk of IV related infections. Unique septum technology allows for the use of a traditional handling technique whilst minimising blood back flow on every manipulation allowing for multiple connections and disconnections of the extension set.

Multi use septum technology design to delay the back flow of blood during the cannulation procedure and on every disconnection and connection.





- Closed system IV catheter supports aseptic practice
- Simplified handling traditional insertion technique
- Superior fixation improving stabilisation of the catheter hub
- Multi use septum minimises blood back flow on every manipulation
- Your choice suitable for use with your preferred needlefree extension device
- Secure passive safety mechanism safety clip technology automatically shields the needle tip everytime and cannot be interfered with prior to cannulation
- Environmentally friendly less sharps bin waste compared to competitor Safety IVCs.
   B. Braun packaging is fully recyclable
- Suitable for use with power injectors for CT scanning refer to Introcan Safety® 3
   Instructions For Use

# Introcan® Certo

## Introcan® Certo

Standard-IV catheter without wings for single hand technique; ISO Standard 10.555-1/5

- PUR-Catheter
- 3-facet bevel
- High transparency of catheter segments
- Four radiopaque stripes
- Hydrophobic blood collector plug
- Sizes color-coded
- Free of latex, PVC and DEHP



Product	Gauss	Gauge Flow (ml/min)			Length	Sales Unit	B. Braun Code
Froduct	Gauge		riow (mi/min)	inner Ø	outer Ø	Sales Utill	D. Draun Couc
1		24G	22	0.51	0.7 X 19	50	4251300
		22G	35	0.61	0.9 X 25	50	4251318
		20G	60	0.76	1.1 X 32	50	4251326
A		18G	105	0.96	1.3 X 32	50	4251342
7		18G	100	0.96	1.3 X 45	50	4251334
JII.		16G	210	1.30	1.7 X 50	50	4251350
		14G	345	1.75	2.2 X 50	50	4251369

## Introcan® W Certo

Standard-IV catheter with wings for single hand technique; ISO Standard 10.555-1/5

- PUR-Catheter
- 3-facet bevel
- High transparency of catheter segments
- Four radiopaque stripes
- Hydrophobic blood collector plug
- Sizes color-coded
- Free of latex, PVC and DEHP



Product	Gougo	Gauge Flow (ml/min)			Length	Sales Unit	B. Braun Code
Froduct	Gauge		FIOW (MII/MIM)	inner Ø	outer Ø	Sales Utilit	D. Draun Couc
		24G	22	0.51	0.7 X 19	50	4253302
		22G	35	0.61	0.9 X 25	50	4253310
		20G	60	0.76	1.1 X 32	50	4253329
		18G	105	0.96	1.3 X 32	50	4253345
T		18G	100	0.96	1.3 X 45	50	4253337
Д		16G	210	1.30	1.7 X 50	50	4253353
		14G	345	1.75	2.2 X 50	50	4253361

# Vasofix® Safety

#### Universal Back Cut Bevel

- Wide choice of insertion angle aids in accessing difficult veins
- Sharp needle bevel offers a reduction in pain due to lower forces
- Creates a V-shaped, tricuspid incision versus a lancet cut for easier catheter insertion, less tissue tearing, faster healing and reduced risk of infection<sup>9</sup>

#### Catheter Material

- Assures easy and smooth catheter advancement
- Available in polyurethane (PUR) for softer, more comfortable, longer in-dwelling performance and kink resistance or FEP with firmer construction. All are PVC, DEHP and Latex-free
- Radiopaque stripes for good visibility under X-ray



Cannot be interfered with prior to cannulation



#### Flexible wings

- Moderate wing size for easy and stable fixation
- Flexible wings adapt to skin surface for highest patient comfort
- Holes for ventilation



#### Flashback Chamber

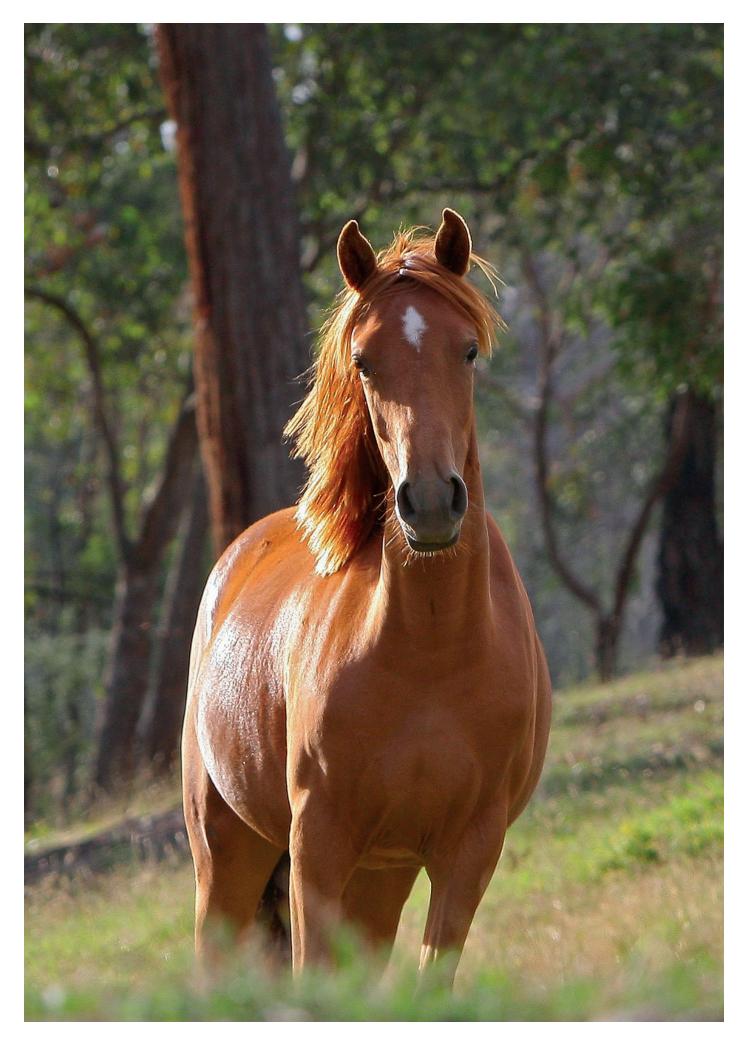
- Transparent flashback chamber allows quick visualisation of blood
- Rapid confirmation of vein access
- Ergonomic grip design for comfortable handling



#### Removable Flash Plug

 Permits attachment of a syringe for aspiration and other specialised procedures

	Introcan Safety		Cannula	0 ': 51 D : 1/ :	550	D. Durana Carla
(	Cannula Size (G)	Length/inch	ø/mm	Gravity Flow Rate ml/min	FEP P	PUR B. Braun Code
	24	3/4	0.7 x 19	22		<b>4</b> 269071S-01
	22	1	0.9 x 25	36		<b>4</b> 269098S-01
	22	1	0.9 x 25	36		4268091S-01
	20	1 1/4	1.1 x 33	61		■ 4269110S-01
	20	1 1/4	1.1 x 33	61		4268113S-01
	18	1 1/4	1.3 x 33	103		■ 4269330S-01
	18	1 3/4	1.3 x 45	96		■ 4269136S-01
	18	1 1/4	1.3 x 33	103		4268334S-01
	18	1 3/4	1.3 x 45	96		4268130S-01
	17	1 3/4	1.5 x 45	128		■ 4269152S-01
	17	1 3/4	1.5 x 45	128		4268156S-01
	16	2	1.7 x 50	196		■ 4269179S-01
	16	2	1.7 x 50	196		4268172S-01
	14	2	2.2 x 50	343		■ 4269225S-01
	14	2	2.2 x 50	343		4268210S-01



# Venofix®

# Safety Winged IV Needle

Venofix® Safety allows a smooth in-vein activation of its safety feature and offers an integrated finger stopper to prevent the index finger from slipping towards the needle tip.

Complete and permanent activation is confirmed when a slight "snap" is felt and the audible "click" is heard.

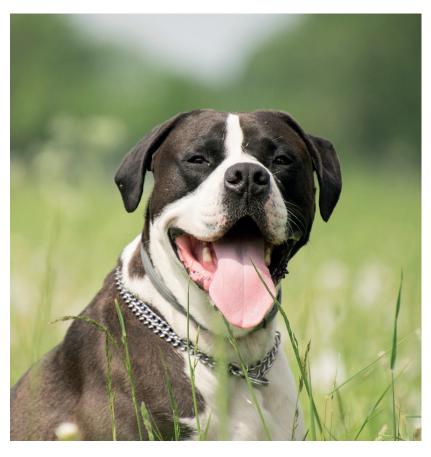
The safety feature of the B. Braun Venofix® Safety is simple, intuitive and does not require any change in venepuncture technique.

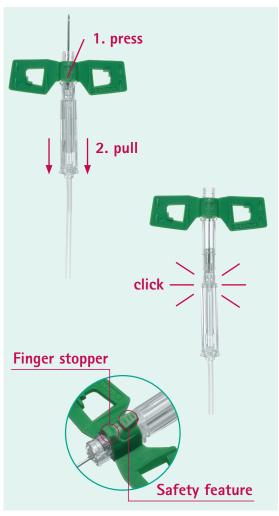
It can be easily activated with one hand by pressing the button situated on top of the device and pulling the needle backwards into the needle hub until complete activation.

The micro-siliconised precision bevel on Venofix® Safety facilitates venepuncture for better patient comfort, even in difficult vein conditions.

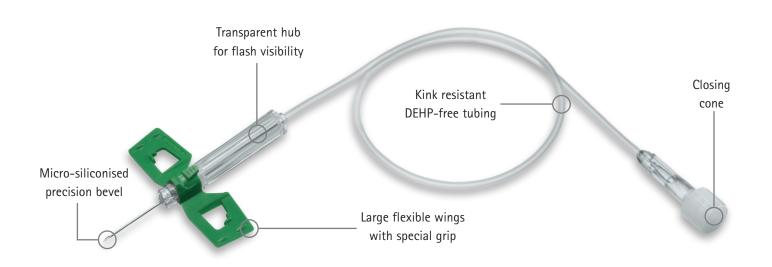
Rapid confirmation of venous access is visible through the transparent hub.

The large flexible wings allow convenient handling and fixation.





- Simple one-hand activation of the safety feature
- In-vein activation reduces exposure to the needle
- Integrated finger stopper for additional protection
- No risk of inadvertent activation
- Large flexible wings ensure convenient handling





With Venofix® Safety, B. Braun offers an intuitive and convenient product for short-term infusion, injection, transfusion and blood collection, in compliance with DIN ISO 23908.

Wings and packaging are color-coded for easy and fast identification of product variants.

Siz	e (G)	Size (mm)	Tubing Length (cm)	Flow Rate (ml/min)	Priming Volume (ml)	B. Braun Code
	27	0.4 x 14	30	2.1	0.69	4056501-01
	25	0.5 x 19	30	5.9	0.69	4056502-01
	23	0.65 x 19	30	14.3	0.69	4056503-01
	21	0.8 x 19	30	32.4	0.69	4056504-01
	21	0.8 x 19	18	34.8	0.51	4056506-01
	19	1.1 x 19	30	60.2	0.69	4056505-01

Sales Unit: 1 box = 50 pcs



# Sterile Hypodermic Needles

	Needles	B. Braun Code
	Sterican G19 x 1 1/4	4665317
	Sterican Needle 22G x 2	4650018
	Sterican 0.30 x 12, 30G x 1/2 Insulin	4656300
	Sterican 0.90 x 25 20G x 1 Blood Sample	4657500
	Sterican G20 x 1 1/2" 0.9 x 40 mm Yellow	4657519
Y	Sterican G21 x 1 1/2" 0.80 x 40 mm Green	4657527
	Sterican G21 x 1" 0.80 x 25 mm Green	4657543
	Sterican 0.70 x 30 mm (G22 x 1 1/4") Black	4657624
.	Sterican G23 x 1 1/4" 0.60 x 30 mm Blue	4657640
1   1	Sterican G23 x 1" 0.60 x 25 mm Blue	4657667
	Sterican G24 x 1" 0.55 x 25 mm Lilac	4657675
	Sterican 0.45 x 25 26G x 1 Standard	4657683
	Sterican 0.40 x 20 27G x 3/4 Standard	4657705
	Sterican G19 x 1 1/2" 1.10 x 40 mm Ivory	4657799
	Sterican G25 x 5/8" 0.5 x 16 mm Orange	4657853
	Sterican 1.10 x 40 G19 x 1 1/2 Short Bevel	4665112
	Sterican G18 x 1 1/2" 1.20 x 40 mm Pink	4665120
	Sterican G27 x 1/2" 0.40 x 12 mm Grey	4665406
	Sterican G26 x 1/2" 0.45 x 12 mm Brown	4665457
	Sterican 0.80 x 80 G21 x 3 1/8 Intramuscular	4665465
	Sterican 2.10 x 80 G14 x 3 1/8 Short Bevel	4665473
	Sterican 0.80 x 50 21G x 2 Intramuscular	4665503
	Sterican 1.10 x 50 G19 x 2 Intramuscular	4665511
	Sterican 0.60 x 60 G23 x 2 3/8 Neural Therap	4665600
	Sterican 0.60 x 80 G23 x 3 1/8 Neural Therap	4665635
	Sterican G21, 0.80 x 120 mm	4665643
	Sterican 0.90 x 70 G20 x 2 3/4 Intramuscular	4665791
	Sterican 0.90 x 50 20G x 2 Short Bevel	4667093
	Sterican 1.20 x 50 G18 x 2 Short Bevel	4667123
	Sterican G25 x 1" 0.5 x 25 mm Orange	9186158
	Sterican 0.50 x 40 25G x 1 1/2 Dental	9186166
	Sterican G27 x 1 1/2" 0.40 x 40 mm Grey	918618
	Sterican Mix 18G, 1.20 x 40 mm Semi Blunt-Eu	4550400-01

# CARESITE®: Clean, Clear Connection

# Designed To Improve Patient Outcomes And Clinician Efficiency

CARESITE is a closed needlefree vascular access system designed to reduce the risk of infection and mechanical phlebitis by allowing manipulation away from the injection site to gain IV access.

The innovative positive displacement technology of the CARESITE needlefree connector helps to further reduce the risk of catheter occlusions by delivering a small bolus of flushing solution upon disconnection ensuring that the catheter tip remains free from blood that could clot.





#### Clean

Studies show that the smooth, flat surface of CARESITE offers a superior microbial barrier<sup>1</sup>. The flat surface enables thorough and easy disinfection whilst the tight seal between the septum and the clear housing reduces the risk of biofilm development through inhibiting microbial ingress.



#### Clear

The outside housing of a needlefree connector can be defined as opaque, clear or partially visible. Depending on the design this determines how much, if any, of the internal fluid path can be seen. A needlefree connector with a clear outer housing allows the clinician to visually assess and confirm that a proper flush has been performed which is vitally important to ensure that it is clear of blood or other infusates.



#### Connection

The easy grip barrel minimises the risk of slippage, helping to prevent key-part touch contamination.

CARESITE Performance Specifications	
Flow rate	208 ml/min
Pressure	400 psi @ 15 ml/sec
Priming volume	0.22 ml
Fluid displacement	0.03 ml (positive)
Number of activations	216 minimum
✓ Microbial ingress testing data	✓ Latex free
✓ Needlefree split septum technology	✓ DEHP free
<ul><li>Emergency syringe compatible</li><li>without the need for an additional adapter</li></ul>	✓ Luer Lock/Luer Slip compatible
✓ MRI compatible – contains no metal	✓ Blood/lipid compatible

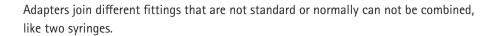
Description		Length (cm)	Priming volume (ml)	Tubing inner ø (mm)	Latex free	DEHP free	Quantity (per box)	B. Braun Code
CARESITE needlefree valve		-	0.22	-	<b>√</b>	<b>√</b>	100	415122-01
CARESITE needlefree single extension		20	0.5	1.3	✓	✓	100	470100-01
CARESITE needlefree single extension (wide bore)		15	0.9	2.8	<b>✓</b>	<b>√</b>	100	470108-01
CARESITE needlefree double extension		18	0.9	1.3	<b>✓</b>	<b>√</b>	50	470106-01
CARESITE needlefree double extension with 2 back check valves		22	1.6	1.3	<b>√</b>	<b>√</b>	100	470182
CARESITE needlefree triple extension	A.	20	1.3	1.3	<b>✓</b>	<b>√</b>	50	470160
CARESITE needlefree triple extension with 3 back check valves		22	2.0	1.3	<b>√</b>	<b>√</b>	50	470161

# Cones, Stoppers and Adapters

# Combi-Stoppers and IN-Stoppers

Combi-Stoppers are universally used to close needlefree injection sites and seal pre-filled syringes. The IN-Stoppers, easy and convenient in handling, close needlefree injection sites and offer a needle access via a latex-free membrane.

# Combifix® adapters





Closing Cones	Product Description	Quantity per Box	B. Braun Code
	■ Universal suitable to close female and male accesses	100	4495101
Combi-Stopper	■ Universal suitable to close female and male accesses	100	4495152
	☐ Universal suitable to close female and male accesses	100	4495209
IN-Stopper	■ Injection port latex free	100	4238010
Stopper	☐ Stopper Luer-Lock	100	4097076

Luer Adapters	Product Description	Quantity per Box	B. Braun Code
Combifix®	Female/female – used to connect two male luer connections	100	5206634
Comonix	Male/male – used to connect two female luer connections	100	5206642

Venting Systems	Product Description	Quantity per Box	B. Braun Code
Air Inlet Needle	19G x 30 mm with bacteria retentive filter	100	4190050
Venting Set	With tubing and bacteria retentive filter	100	4190114

# **Protective Admixture Tools**

#### PureSite Closed Male Connector

Increased protection against hazardous drug exposure. PureSite needlefree and permanent connection assures a fast and minimal risk drug administration.

- Permanent connection to syringe and IV set on female Luer Lock connector
- Auto-closure upon disconnection
- Compatible with standard Luer Lock connections
- Minimises chemical and microbiological contamination
- Helps prevent sharps injuries
- Intuitive needlfree handling



	Product Description	Quantity per Box	B. Braun Code
PureSite	closed male connector	100	4551105

#### **Dust Cover Cap**

Specially designed for PureSite, the Dust Cover Cap offers the comfort of a closing cap for drug transportation.

PureSite is easy to transport with its auto-close technology and protective Dust Cover Cap.



	Product Description	Quantity per Box	B. Braun Code
PureSite	Dust cover cap	200	4551101

SwabCap® Valve Cap with 70 % IPA. Passive disinfection and physical barrier to cross contamination for needlefree access devices.

- SwabCap® maintains a disinfected valve surface for up to 7 days if not removed
- Non-particulate sponge prefilled with 70 % IPA
- 70 % IPA bathes threads



	Product Description	Quantity per Box	B. Braun Code
SwabCap	SwabCap Valve Cap with 70% IPA	200	EM-SCXT3

# **Protective Admixture Tools**

## Mini-Spike® 2

Swabable valve and its automatic closure upon syringe disconnection minimise the risk of chemical and microbiological contamination.

- Needlefree design helps to eliminate the risk of sharps injuries through the admixture process
- Colour coding for easier differentiation within the product range
- Large handling area provides a comfortable grip
- Two lumen spike for easy piercing of stoppers and effective flow through the air and fluid\* filters
- Protective cap protects against contamination
- Air filter\*\* minimises the risk of toxic aerosol release and makes pressure balancing technique unnecessary

\*Fluid filter with ref. 4550591 and 4550592

<sup>\*\* 0.45</sup> μm air filter with ref. 4550590 and 4550591, 0.2 μm air filter with ref. 4550592



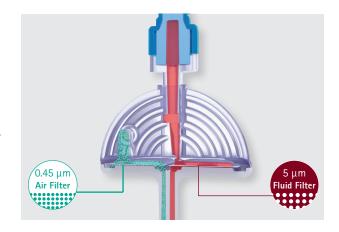


	Product Description	Quantity per Box	B. Braun Code
Mini-Spike 2		50	4550590

# Mini-Spike® 2 Filter

Fluid filter retains particles bigger than 5  $\mu$ m (e.g. rubber or undissolved drug).

- Same benefits as Mini-Spike® and more
- $\blacksquare$  Reduced particle contamination of the fluid. Integrated 0.45  $\mu m$  air filter

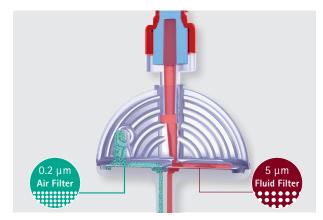


	Product Description	Quantity per Box	B. Braun Code
Mini-Spike 2 Filter		50	4550591

# Mini-Spike® 2 Chemo

Fluid filter retains particles bigger than 5  $\mu m$  (e.g. rubber or undissolved drug).

- Reduced risk of contamination with toxic aerosols
- Reduced particle contamination of the fluid. Integrated 0.2 μm air filter



	Product Description	Quantity per Box	B. Braun Code
Mini-Spike 2 Chemo		50	4550592



#### Transofix

Transfer spike for large containers. Fits into rubber stoppers 6.3 mm and bag set ports.

- Allows excellent flow even with non-evacuated glass vials. Large internal diameter
- Easy-to-use. Large grip flanges



		Product Description	Quantity per Box	B. Braun Code
Transofix	8		50	4090500

# Needlefree Accessories

# Discofix® C stopcocks and manifolds

Whether you are attaching a stopcock to a chest drain or integrating it into an infusion system, it is essential that all connections and adjustments can be performed quickly and easily. During manipulations, you must be able to depend on a secure, leakproof connection.

- Allows convenient access for injections and aspirations by rotating adapter
- Lets you feel the proper setting by tactile response at every 45° turn
- Resists the hazardous effects of pharmaceuticals
- Maintains a leakproof connection even during long-term application
- Helps to prevents leakage, contamination and air embolism



Stopcocks Drug and Lipid Resistant	Colour	Rotating Adapter	Extension (cm)	Quantity per Box	B. Braun Code
Discofix® C 3-way stopcocks		•		100	16494C
				100	16495C
				100	16496C
			10	50	16500C
			10	50	16501C
			25	50	16520C
			50	50	16540C
			75	50	16551C
-			100	50	16560C
Discofix® C 3-way stopcock with safeflow® valve					
	•	•	10	50	16500CSF

Stopcocks Drug Resistant	Colour	Rotating Adapter	Sales Unit/Pcs.	B. Braun Code
Discofix® C 3-gang manifolds			50	16605C

Stopcocks Lipid Resistant	Colour	Swivel lock	Extension (cm)	Quantity per Box	B. Braun Code
Discofix® 3-way stopcocks		•		50	4095111
		•		50	4095120
		•		50	4095138
		•		50	4095146
			10	50	4098102
			10	50	4098250
			25	50	4098218
			50	50	4098501
			75	50	4098234
			100	50	4098080
Discofix® C 1-way stopcock	•	•		100	455980

Discofix® Combi-Holder	Product Description	Quantity per Box	B. Braun Code
18-6	Combi-holder, suitable for stopcock manifolds and Medifix® manometer Scale	1	4086007

## **BACK CHECK VALVES**

Back check valves are an effective technical precaution for infusion systems. Connect a back check valve to your infusion system to help prevent a retrograde flow of blood or medication.

Backcheck Va	alves	Product Description	Quantity per Box	B. Braun Code
Infuvalve	E B	For gravity infusion, suitable for parallel infusion	50	4094000N
Safsite®		Two-way valve, suitable for IV-systems	100	415068
Safeflow®			50	409100H
Ultrasite <sup>®</sup>		Two-way valve with positive displacement to help prevent backflow of blood, suitable for IV-systems	100	415111

# **Syringes**

Three-piece syringes for smooth, controlled, infusion delivery

## Luer Slip and Luer Lock Syringes

- Available in all sizes from 1 ml 50 ml
- Fine dosage markings for 1 ml Syringes
- Smooth gliding and leakage prevention during infusion
- High transparency
- Luer Lock Syringes compatible for use in syringe driver
- Luer Slip Syringes have eccentric connections from 3 ml 50 ml allowing for smoother infusions due to the low insertion angle



#### 50 ml Luer Lock UV-Protect Syringe

- For use with light sensitive drugs
- Translucent device makes the drug visible
- Compatible for use in syringe driver
- Easy detection of air bubbles
- Reaches a spectrum of up to 520 nm wave lengths which is needed for Vitamins and Nifedipine



## **Irrigation Syringes**

- 50 ml and 100 ml versions available
- For tube feeding and irrigation
- Centric catheter fitting cone for direct connection
- 50 ml version also available with Luer Slip adapter



Latex free ✓

PVC free ✓

DEHP free ✓



Omnifix® <b>Syringes</b>	Product Description	Quantity per Box	B. Braun Code
	1 ml Luer Slip	100	9161406V
	2 ml Luer Slip	100	4616022V
s = 10 = 20	3 ml Luer Slip	100	4616025V
30	5 ml Luer Slip	100	4616057V
15 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1	10 ml Luer Slip	100	4616103V
20 20 20 20 20 20 20 20 20 20 20 20 20 2	20 ml Luer Slip	100	4616200V
	30 ml Luer Slip	100	4616308F
	50 ml Luer Slip	100	4616502F
	2 ml Luer Lock	100	4617029V
10	3 ml Luer Lock	100	4617022V
5 20	5 ml Luer Lock	100	4617053V
5 15 20 40	10 ml Luer Lock	100	4617100V
25 — 25 — 26 — 27 — 26 — 27 — 27 — 27 — 27 — 27	20 ml Luer Lock	100	4617207V
N = B = C   Latex-feet   BBRAIN   Latex-feet   BBRAIN   Re-feet	30 ml Luer Lock	100	4617304F
-inle	50 ml Luer Lock	100	4617509F
8	50 ml Irrigation	100	4613503F
Omnification of the control of the c	100 ml Irrigation	100	4614003F
	50 ml Irrigation with Luer Slip Adapter	100	4613554F
8 3 (8) 15 10 10 10 10 10 10 10 10 10 10 10 10 10	50 ml Luer Lock, UV Protect	100	4617510F-06

# Omniflush® Syringes

# Designed for safety and convenience

- Sterile solution and fluid path (QC002, SAL 10<sup>-6</sup>)
- For flushing of compatible intravenous tubing and/or indwelling access devices
- Packed inside a single unit tubular bag





#### Reduces blood reflux

Blood reflux is generated when all fluid is flushed from a three-part standard syringe, the syringe plunger is fully depressed in the bottom of the syringe barrel and then released. When the syringe plunger tip rebounds, a vacuum is created, thus pulling blood back into the catheter lumen. Catheter lumen occlusion, with blood reflux into the lumen, is the major clinical concern<sup>3</sup>.

The Omniflush® syringe is designed specifically to reduce unintended blood reflux into the catheter lumen thus decreases the risk of catheter blockage.

# 10 ml B. Braun Omniflush® 0 mm\*

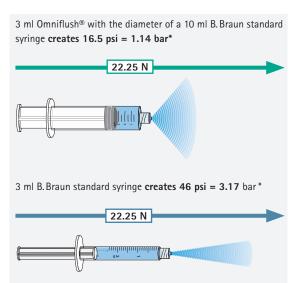
Three-part 10 ml standard syringe, customary in the market

## Decreases the risk of catheter damage

The syringe size has an impact on the risk of catheter damage. Smaller diameter syringes generate greater pressure exerted against the catheter wall on injection than larger diameter syringes.<sup>2</sup>

Omniflush® is available in the filling volumes 3 ml, 5 ml and 10 ml. The inside diameter of the syringe barrel for each filling volume is identical to the 10 ml B. Braun standard syringe.

The larger inside diameter of the Omniflush® syringe barrel results in lower flushing pressure compared to 3 ml or 5 ml standard syringes and decreases the risk of catheter rupture.



<sup>\*</sup>Average reflux as measured in G20 x 33 mm standard IV Catheter; data on file at B. Braun.

<sup>\*\*</sup>Reflux of blood after flushing may occur because syringe components are not specifically designed for flushing procedures.

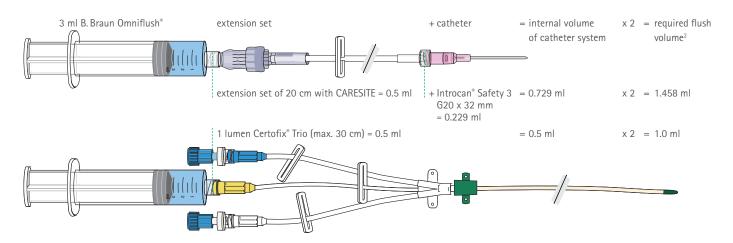
<sup>\*</sup>Pressure generation at 22.25 N force; data on file at B. Braun.

Gives the flexibility to reduce the flushing volume to a patient's individual minimum.

The Infusion Therapy Standards of Practice recommend a minimum flush volume equal to twice the internal volume of the catheter system, which includes the catheter, extension set, and/or needleless injection system added to the catheter hub<sup>4</sup>.

With Omniflush® the fluid amount used for flushing can be reduced to the required minimum.

Examples for required	Flush	volume		
Catheter/cannula/ other IV access devices	Extension set (length)	3 ml	5 ml	10 ml
Introcan® Safety 3	Caresite double needlefree extension (20 cm)	•		
Vasofix® Safety	Caresite double needlefree extension (20 cm)	•		
Certofix® Trio				
Port catheter				
Arterial cannula				
Intraosseous cannula		•	•	



#### **User Benefits**

- **Helps to reduce manipulation:** Omniflush® is a ready-to-use flush system, which improves processes due to less preparation steps and prevents contamination risks occurring while preparing the flush solution
- Helps to reduce Sharps Injury: Glass ampoules, bottles and cannulas are not required any more. Omniflush® circumvents the necessity of needles throughout the whole flushing process
- Helps to reduce complex Catheter Care: Flushing assesses catheter function, maintains vascular access and decreases the risk of catheter occlusion/thrombus formation<sup>3</sup>. Omniflush® simplifies catheter care and supports compliance with best practice IV maintenance procedures

#### **Product Codes**

Filling volume (ml)	Syringe volume (ml)	Units per box	B. Braun Code
10	10	100	EM-3513576
5	10	100	EM-3513575
3	10	100	EM-3513572

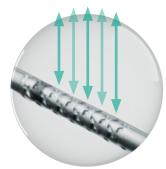
Omniflush® is a medical device which is CE-certified according to the requirements of the European Council Directive 93/42/EEC. Omniflush® syringes are not manufactured with PVC, DEHP or natural rubber latex. Omniflush® syringes are produced in compliance with QSR-standards and meet highest quality standards.

# B. Braun Peripheral Nerve Block Needles

#### Peripheral Nerve Blocks

The peripheral nerve block needles are designed with a distinctive safety X-pattern with a maximised number of edges that enable high reflection of ultrasound waves, ensuring excellent visibility of the needle under ultrasound. Due to its design, the X-pattern reflects ultrasound beams back to the probe even at steeper penetration angles.

The peripheral nerve block needles provide enhanced visibility under ultrasound with minimal artefacts while maintaining the well recognised puncture and gliding characteristics.



Reflection of ultrasound waves



Stimuplex® 30° bevel

# LONG SHORT SHORT TIP

#### **User Benefits**

- Highly visible echogenic X-pattern facilitates clear needle visualisation
- Safety code enables easier identification of the needle and needle tip position
- Stimuplex® 30° bevel with insulation for optimal puncture and gliding behaviour
- 360 degree X-pattern reflectors ensuring visibility from all sides

## Safety Code

B. Braun nerve block needles feature a safety code designed to help locate the needle tip in challenging nerve block conditions. The X-pattern is strategically applied on the first 20 mm of the needle shaft to create the three segmented code "short-short-long". This enables the user to distinguish between the needle tip and the upper needle shaft.\*

\*Please note that the visualisation of the safety code may depend on a number of factors such as proper setting of the ultrasound unit, patient related conditions of the tissue, artefacts and proper alignment of the US probe and the needle.

## Stimuplex® Ultra 360

- For single shot nerve blocks using nerve stimulation or ultrasound
- Safety code with high visibility X-pattern reflectors
- Well recognised 30° Stimuplex® bevel
- High quality low friction coating
- 50 cm long DEHP-free injection tubing

Stimuplex® Ultra 360 has ideal properties to perform an ultrasound guided peripheral nerve block and nerve stimulation. Due to high visibility of the X-pattern, the needle is easy to visualise with minimum artefacts. The 30° bevel together with a high quality coating provides an excellent feel when advancing through tissue. Stimuplex® Ultra 360 is available in lengths of 35–150 mm and in sizes G20 and G22.

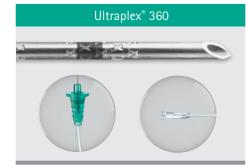


ø (G) and Length (inch)	ø and Length (mm)	Sales unit/Pcs.	B. Braun Code	
Needles with 30° bevel an	d stimulation cable			
$22 \mathrm{G} \times 1^3/_8$ "	0.70 x 35		4892503-01	
22 G x 2"	0.70 x 50		4892505-01	
$22 \mathrm{G} \times 3^1/_8$ "	0.70 x 80	25	4892508-01	
20 G x 4"	0.90 x 100		4892510-01	
20 G x 6"	0.90 x 150		4892515-01	

## Ultraplex® 360

- For single shot nerve blocks performed under ultrasound
- Safety code with high visibility X-pattern reflectors
- Well recognised 30° Stimuplex® bevel
- High quality, low friction surface
- 50 cm long DEHP-free injection tubing

Ultraplex® 360 is a non-stimulating ultrasound needle, equipped with ideal product properties to perform ultrasound guided peripheral nerve blocks, when nerve stimulation is not indicated. Due to high visibility of the X-pattern, the needle is easy to visualise with minimum artefacts. The 30° bevel together with a high quality treated surface provides an excellent feel when advancing through tissue. Ultraplex® 360 is available in lengths of 35-150 mm and in sizes G20 and G22.



ø (G) and Length (inch)	ø and Length (mm)	and Length (mm) Sales unit/Pcs.	
Needles with 30° bevel			
$22 \mathrm{G} \times 1^3 /_8$ "	0.70 x 35		4892603-01
22 G x 2"	0.70 x 50		4892605-01
$22 \mathrm{G} \times 3^{1}/_{8}$	0.70 x 80	25	4892608-01
20 G x 4"	0.90 x 100		4892610-01
20 G x 6"	0.90 x 150		4892615-01

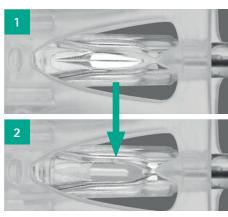
# B. Braun Spinal Anaesthesia



- Ergonomic hub designed for:
  - enhanced needle control
  - improved grip and tactile feedback
- Crystal prism for fast and easy identification of CSF flashback in the needle hub:
  - "Total reflection" Prism shines silver before CSF enters the hub (1)
  - Transparency Prism turns transparent when CSF enters the hub (2)
- Introducer design providing 10 mm more usable Spinal needle length











# Pencan® with Pencil Point bevel

- Handling through identification of tissue structures, excellent tactile feedback
- Protection against PDPH, paresthesias, vascular puncture and nerve damage thanks to the atraumatic tip design
- Sturdy design, no tip deformation even after bone contact
- Minimal intrathecal penetration depth, avoiding incomplete blocks due to needle-tip design



## Spinocan® with Quincke bevel

- Sharp bevel for low puncture force
- Control due to reliable sensation of the tactile dura click
- Low rate of PDPH thanks to fine gauge needle design
- Perfect stylet fit, i.e. no tissue coring (risk of epidermoid tumour formation)



# Atraucan® with Two-Zone bevel

- Low puncture force
- Minimal puncture trauma
- Greatly reduced risk of PDPH

Atraucan® features a particularly subtle, sensitive bevel geometry allowing atraumatic puncture. First, a small, accurate incision is made with the first sharp zone bevel. Then, the dura mater is dilated by the second non-cutting zone bevel with no further trauma, minimising the risk of postdural puncture headache (PDPH).

# B. Braun Spinal Anaesthesia



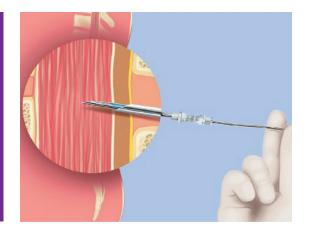
# Continuous Spinal Anaesthesia

Continuous Spinal Anaesthesia (CSA) offers many advantages for both physician and patient.

In contrast to single-dose Spinal Anaesthesia, with CSA the anaesthetic can be administered during the operation. Repeat dosing to prolong and control the duration and level of blockade is possible at any time, thereby improving overall anaesthesia control. The block also subsides more rapidly. The risk of cardiovascular side effects and respiratory compromise is significantly reduced.



- Intelligent over-the-needle design: No CSF leakage, therefore minimised risk of PDPH
- Quick positive feedback on catheter position
- Less medication required, i.e. minimal risk of toxic reactions and cardiovascular side effects
- Postoperative pain management
- Short recovery periods



## Spinocath® – intelligent design

Spinocath® features a catheter-over-needle design, the catheter is positioned over the spinal needle. After puncturing the dura mater the needle is withdrawn from the catheter, which simultaneously seals the hole in the dura. In this way, CSF leakage is prevented right at the start of the procedure, reducing the risk of postdural puncture headache (PDPH) to a minimum. Spinocath® provides the anaesthesiologist with accurate feedback. The pronounced dura click, and the visual check of CSF flashback in a second, confirming the intrathecal catheter position.

## Control through feedback

Conventional products: CSF leakage - high risk of PDPH

Catheter is smaller than dural opening, considerable CSF leakage after removal of the puncture needle is to be expected.



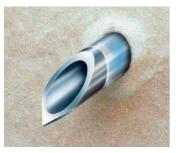
1. Situation upon dural puncture within the intrathecal space



2. Outside the intrathecal space after removal of needle

#### Spinocath®: No CSF leakage – minimal risk of PDPH

Catheter is larger than spinal needle thus dilates and seals the dural opening.



1. Situation upon dural puncture within the intrathecal space



2. Outside the intrathecal space after removal of needle



# B. Braun Epidural Anaesthesia



Each patient presents a unique anatomical challenge, therefore precision and versatility are equally important in epidural procedures. With B. Braun epidural needles you are ensured accurate construction and reliability.

## Tuohy-type needles

- The unique Tuohy curve and bevel design: Excellent feel and differentiation of tissue layers
- Highest quality of bevel grinding: Consistent tactile feed back in each procedure
- Polished inner bevel edge: Minimises the risk of catheter shearing



Polished inner bevel edge minimises the risk of catheter shearing



Threading assist guide fits securely into needle hub and assists easy advancement of the catheter

- Unique high precision Tuohy curve and bevel design for excellent tactile feedback and differentiation of tissue layers
- Superior bending stiffness perfect control of needle advancement



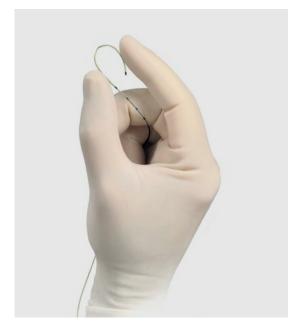
An increasing use of epidural catheters for various applications in anaesthesia, analgesia and pain therapy requires specific catheter features and a diversity of performance criteria.

Perifix® epidural catheters are made from a unique plasticizer-free and latex-free formulation of polyamide with superior bio-compatibility.

Easy catheter insertion requires a relatively stiff catheter shaft to provide adequate thrust: Perifix® Standard.

However, a soft catheter is more difficult to thread and remove. The ideal epidural catheter is the combination of a stiff but flexible catheter shaft combined with a very soft atraumatic tip: Perifix® Soft Tip.

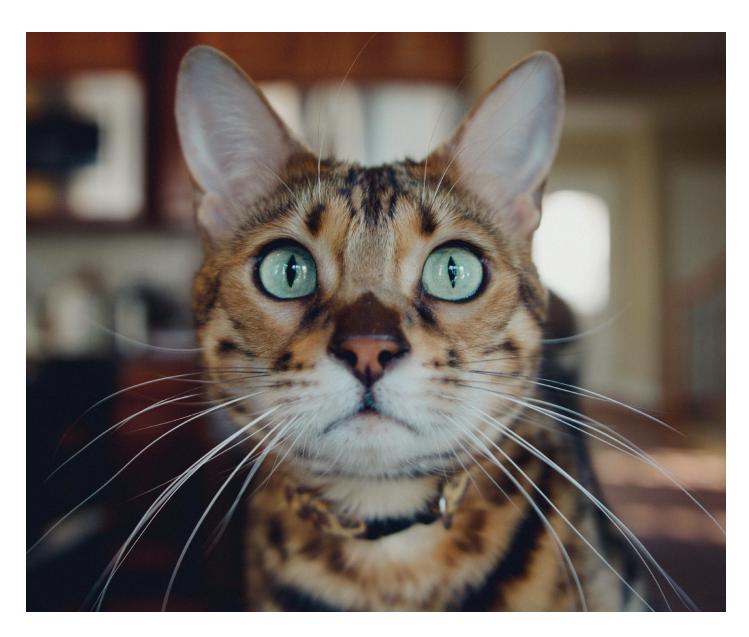
Now ideal stiffness for catheter insertion, desired softness for placement inside the body are combined with a novel tip configuration, and 3 pairs of laser drilled micro-holes in ONE yellow catheter: Perifix® ONE.



- Perifix® Standard and Soft Tip catheters
- Excellent shaft stability and kink resistance while still flexible for simple placement and removal
- Crystal clear for visualisation of fluids
- Perifix® Soft Tip catheter
- Flexible and atraumatic soft tip design
- Helps to reduce risk of complications
- 3 Perifix® ONE
- Complete blocks through perfect spread
- Increased safety, no confusion with other infusion lines



# B. Braun Epidural Anaesthesia



Regional blocks provide excellent peri and post-operative pain relief. B. Braun has developed a comprehensive practice related product range which meets the up-to-date requirements in the field of epidural, caudal as well as plexus and Spinal Anaesthesia ranging from single shot needles to sets for continuous catheterisation.

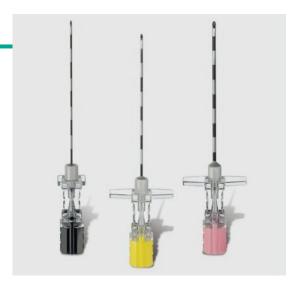
- Complete product range suitable for each indication
- Perfect stylet fit avoids coring effects



## Perican® Paed - Tuohy epidural needles

Three different needle sizes (1.3 mm/18 G, 0.9 mm/20 G, 0.7 mm/22G)

- For continuous catheter placement and single shot technique
- Special length of 50 mm with 5 mm depth markings
- Precisely fitting stylets: Helps to reduce the risk of tissue coring and potential epidermoid tumour development



# Epican® Paed – Caudal needles

Three different needle sizes (0.9 mm/20 G, 0.7 mm/22 G, 0.5 mm/25 G)

- Special lengths of 50 mm, 35 mm, and 30 mm with 5 mm depth markings
- Precisely fitting stylets: Helps to reduce the risk of tissue coring and potential epidermoid tumor development



# Perifix® ONE Paed – Epidural sets

Perifix® ONE Paed epidural sets in 20/24 G and 18/20 G:

Catheters with practice-related distance markings



# B. Braun Peripheral Nerve Blocks



## Stimuplex® HNS 12

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 kΩ
- Charge delivered (in nC, if activated)

- 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



Nerve Stimulators	Description	Sales unit/Pcs.	B. Braun Code
500-	Stimuplex® HNS 12 nerve stimulator for Stimuplex® and Contiplex® needles	1	4892098



# **Ordering Codes**

Spinocan		Size	Length ø (mm)	Needle ø (mm)	Length (inch)	Sales unit/ Pcs.	B. Braun Code			
			Quin	cke needles fo	r Spinal Anaesth	esia				
	_	29G	88*	0.33	3 1/2"	25	4501900			
	-	27G	88	0.4	3 1/2"	25	4503902			
1	•	26G	88	0.45	3 1/2"	25	4502906			
		25G	75	0.5	3"	25	4505751			
		25G	88	0.5	3 1/2"	25	4505905			
		22G	40	0.7	1 1/2"	25	4507401			
		22G	75	0.7	3"	25	4507754			
		22G	88	0.7	3 1/2"	25	4507908			
		20G	75	0.9	3"	25	4509757			
		20G	88	0.9	3 1/2"	25	4509900			
		19G	40	1.1	1 1/2"	25	4501144			
		19G	88	1.1	3 1/2"	25	4501195			
		18G	75	1.3	3"	25	451373			
		18G	88	1.3	3 1/2"	25	4501390			
or Arms	Quincke needles long length									
TO T	•	29G	120	0.33	4 3/4"	25	4501918			
70		27G	120	0.4	4 3/4"	25	4502140			
- N		26G	120	0.45	4 3/4"	25	4504917			
		25G	120	0.5	4 3/4"	25	4505913			
	•	22G	120	0.7	4 3/4"	25	4506090			
Spinocan		Size	Length Ø (mm)	Needle Ø (mm)	Length (inch)	Sales unit/ Pcs.	B. Braun Code			
		Special atr	raumatic needles	for Spinal an	aesthesia with A	traucan guide no	eedle			
	•	26G	88	0.45	3 1/2"	25	4504739			

Pencan	Size	Length Ø (mm)	Needle Ø (mm)	Length (inch)	Sales unit/ Pcs.	B. Braun Code
	_					
	27G	88	0.4	3 1/2"	25	4502027
	27G	88*	0.4	3 1/2"	25	4502051
	27G	103*	0.4	4"	25	4502124
	25G	88	0.5	3 1/2"	25	4502019
	25G	88*	0.5	3 1/2"	25	4502043
	25G	103*	0.5	4"	25	4502116
	22G	88	0.7	3 1/2"	25	4502035
		Pe	ncil point need	les long length		
	27G	120	0.4	4 3/4"	25	4502132
	25G	156	0.5	6"	25	333877
Spinocan Introducer Needles (Square hub)	Size	Length Ø (mm)	Needle Ø	Length (inch)	Sales unit/ Pcs.	B. Braun Code

Spinocan Introducer Needles (Square hub)		Size	Length ø (mm)	Needle ø (mm)	Length (inch)	Sales unit/ Pcs.	B. Braun Code
			For	spinal needles ■	■ 26G and ■ 250	G	
	•	20G	35	0.9	1 3/8"	25	4505000

# Ordering Codes

Epidural Needles	Size	Length Ø (mm)	Needle Ø (mm)	Length (inch)	Sales unit/ Pcs.	B. Braun Code
			Perican with	n Tuohy bevel		
	18G	80	1.3	3 1/4"	25	4512383
	18G	120	1.3	4 3/4"	25	4512453
	18G	150	1.3	6"	25	4512200
	17G	80	1.5	3 1/4"	25	4512588
	16G	80	1.7	3 1/4"	25	4512782

Paediatric Needles	Size		Length Ø (mm)	Needle Ø (mm)	Length (inch)	Wings	Sales unit/ Pcs.	B. Braun Code
				Perican Pae	d with Tuohy be	evel		
		22G	50	0.73	2"		25	4502078
		20G	50	0.9	2"	✓	25	4502094
	-	18G	50	1.3	2"	✓	25	4502302
				Epican Paed f	or caudal anaes	thesia		
	-	25G	30	0.53	1 1/8"		25	4502400
		22G	35	0.73	1 9/8"		25	4502418
	•	20G	50	0.9	2"		25	4502426

Epidural Catheter with Catheter Connector	Size	Catheter Ø outer length	Catheter Ø inner length	length (mm)	Suitable for Perican	Sales unit/ Pcs.	B. Braun Code
Perifix® Standard Catheter			Cathe	ter with 3 later	al eyes		
	20G	0.85	0.45	1000	18G 1.3 mm	25	4513150
	19G	1.05	0.60	1000	16G 1.7 mm	25	4513258
			Cathete	er with central	opening		
	20G	0.85	0.45	1000	18G 1.3 mm	25	4513177
Perifix® Soft Tip Catheter			Cathe	ter with 3 later	al eyes		
F	20G	0.85	0.45	1000	18G 1.3 mm	25	4515048
			Cathe	ter with 6 later	al eyes		
Perifix® ONE Catheter	20G	0.85	0.45	1000	18G 1.3 mm	25	4513150C
	19G	1.05	0.60	1000	16G 1.7 mm	25	4513258C

Perifix Catheter Fixation	Description	Sales unit/Pcs.	B. Braun Code
20 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	Perifix Catheter Fixation	25	4511200
The second secon	Perific Catheter Fiaxation Cover (only)	25	4511201

	Perifix Size		Size	Description	Sales unit/Pcs.	B. Braun Code	
4		erifix® Pin. PinPad Perifi, ad Perifix® PinPac fix® PinPad Perifix®			Loss of resistance (LOR) syringe, luer-slip	25	4637100
2	x° PinP	Pad Perifix' PinPad  x' PinPad Perifix' Perifix' PinP  'nPad P'			Loss of resistance (LOR) syringe, luer-slip	25	4638107
utex-free				19G	Perifix catheter connector	50	4513801
				20/24G	Perifix catheter connector	50	4513800
					Perifix epidural flat filter 0.2 μm	25	4515501
					Perifix pinpad filter fixation	25	4515510

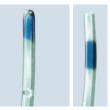
# **Ordering Codes**

# Perican Tuohy epidural needle

Size	2	Ø	Length		
	20G	0.9 mm	50 mm		
	18G	1.3 mm	80 mm		
	18G	1.3 mm	50 mm		
	16G	1.7 mm	80 mm		









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Complete Sets		Perican  Tuohy epidural needle		Perifix ONE  Epidural catheter, 6 lateral eyes		Perifix Standard Epidural catheter, 3 lateral eyes			Perifix Soft Tip	Perifix LOR	
	Туре								Central opening	Syringe	
		50/80 mm	120 mm	24G	20G	19G	20G	19G	20G	20G	luer slip
D : C C	Perifix 420						✓				
	Perifix 421						✓				✓
Perifix Standard	Perifix 430							<b>√</b>			
catheter	Perifix 431							<b>√</b>			<b>√</b>
	Perifix 620								✓		
Perifix Soft Tip	Perifix 900	-								✓	
catheter	Perifix 901									<b>√</b>	<b>√</b>
Davidin ONE	Perifix ONE 420	-			✓						
Perifix ONE	Perifix ONE 421				<b>√</b>						<b>√</b>
catheter -	Perifix ONE 431					<b>√</b>					<b>✓</b>

Complete Sets	Туре	Perican	Pe	rifix ON	IE	Peri	fix Standard	Perifix	Soft Tip	Perifix LOR
Davidiu Chandand	Perifix 400					✓		_		
Perifix Standard — catheter —	Perifix 401	•				<b>√</b>				✓
Catheter —	Perifix 402						✓			✓
	Perifix 700	-							✓	
Perifix Soft Tip	Perifix 701	•							✓	✓
catheter	Perifix 730								✓	✓
_	Perifix 750	-							✓	✓
	Perifix ONE 400	-		✓						
D :C ONE	Perifix ONE 401	-		✓						✓
Perifix ONE —	Perifix ONE 402				<b>√</b>					✓
catheter —	Perifix ONE 418			✓						✓
	Perifix ONE 451	-		✓						✓

Complete Sets	Туре	Perican	Perifix ONE	Perifix Standard	Perifix Soft Tip	Perifix LOR
Perifix ONE	Perifix ONE 400		✓			✓
catheter	Perifix ONE 451	•	<b>√</b>			✓

Complete Sets	Туре	Perican	Perifix ONE	Perifix Standard	Perifix Soft Tip	Perifix LOR
	Perifix 100			✓		
Perifix ONE	Perifix 300			✓		
catheter -	Perifix 301			✓		✓
catneter	Perifix 302			✓		✓
	Perifix 310			✓		













# Sterican needle

	Ø	Length
25G	0.5 mm	16 mm
21G	0.8 mm	40 mm
18G	1.2 mm	40 mm

Omnifix	Omnifix/Sterican	Omnifix/Sterican	Perifix Filter	Perifix PinPad	Perifix Catheter Connector	Sales	B. Braun
Three part syringe, 3 ml, luer-lock	Three part syringe, 3 ml, 20 ml, luer-lock, 3 hypodermic needles	Three part syringes, 3 ml, 10 ml, 20 ml, luer-lock, 3 hypodermic needles	Epidural filter 0.2 m pressure resistant up to 7 bar	PinPad filter fixation	Catheter Connector	unit/ Pcs.	Code
		✓	✓	✓	✓	10	4514203
	✓		✓	✓	✓	10	4514211
		✓	<b>√</b>	<b>√</b>	<b>√</b>	10	4514300
	✓		<b>√</b>	<b>√</b>	<b>✓</b>	10	4514319
		✓	<b>√</b>	✓	✓	10	4516206
		✓	✓	✓	✓	10	4510291
			✓	✓	✓	10	4510305
		✓	✓	<b>√</b>	<b>√</b>	10	4514203C
	✓		<b>√</b>	<b>√</b>	<b>√</b>	10	4514211C
	✓		<b>√</b>	✓	✓	10	4514319C

Omnifix	Omnifix/Sterican	Omnifix/Sterican	Perifix Filter	Perifix PinPad	Perifix Catheter Connector	Sales unit/Pcs.	B. Braun Code
			✓		✓	20	451409
			✓		✓	20	4514017
			✓		✓	20	4514025
			✓	✓	✓	20	4510216
			✓		✓	20	4510097
			✓	✓	✓	20	4517309
			✓	✓	✓	20	4517504
			✓		✓	20	4514009C
			✓		✓	20	451417C
			✓	<b>√</b>	✓	20	4514025C
			✓	<b>√</b>	✓	10	4514183C
			<b>√</b>	<b>─</b> ✓	✓	20	4514513C

Omnifix	Omnifix/Sterican	Omnifix/Sterican	Perifix Filter	Perifix PinPad	Perifix Catheter Connector	Sales unit/ Pcs.	B. Braun Code
✓			✓	✓	✓	10	4512006C
<b>√</b>			<b>√</b>	<b>√</b>	<b>√</b>	10	4512014C

Omnifix	Omnifix/Sterican	Omnifix/Sterican	Perifix Filter	Perifix PinPad	Perifix Catheter Connector	Sales unit/ Pcs.	B. Braun Code
					✓	20	4511000
					<b>√</b>	20	4513002
					<b>✓</b>	20	4513010
					<b>√</b>	20	4513029
					<b>√</b>	20	4512100

# **Technical Data**

Infusomat® Space, Volun	netric infusion pump	
Type of unit	Volumetric infusion pump	
Dimensions	214 x 68 x 124 mm (WxHxD)	
Weight	Approx. 1.4 kg	
Moisture protection	IP 22, drip protected for horizontal usage	
Display	Backlit graphic display, ${\sim}40^{\circ}$ read angle from all sides	210 mm
Keypad	Backlit keys, cell phone like cursor navigation	
Flow Rates	0.1-1200 ml/h	***
Accuracy of set delivery rate	<< ±0,5 % mechanical accuracy ± 5 % according to IEC/EN 60601-2-24	124 mm
Operating Temperature	+10° C + 40° C +50° F +105° F	
Voltage	11-16 V DC supplied by external Space Power Supply or by SpaceStation	
Battery operating time	Minimal power consumption of the devices and new battery technology ensure long operating times, e.g. 9.4 hrs. @ 80 ml/h, 8.5 hrs. @ 100 ml/h	214 mm
Lifetime	Min. 10 years under continuous duty conditions	
Article-No	Infusomat® Space: 8713050 Infusomat® Space P: 8713070	124 mm   8713050 Infusmat® Space

Perfusor® Space		
Type of unit	Infusion syringe pump, syringe driver	
Dimensions	249 x 68 x 152 mm (WxHxD), drive parked	
Weight	Approx. 1.4 kg	
Moisture protection	IP 22, drip protected for horizontal usage	249 - 373 mm
Display	Backlit graphic display, ~40° read angle from all sides	
Keypad	Backlit keys, cursor navigation	E S
Flow Rates	0.01-1800 ml/h	
Accuracy of set delivery rate	<< ± 0,5 % mechanical accuracy ± 2 % in compliance with IEC/EN 60601-2-24	152 mm
Operating Temperature	+5° C + 40° C +41° F +105 °F	
Voltage	11 - 16 V DC supplied by external Space Power Supply or by SpaceStation	249 - 373 mm
Battery operating time	Minimal power consumption of the devices and new battery technology ensure long operating times, e.g. 16.8 hrs @ 1 ml/h, 16 hrs @ 5 ml/h, 14 hrs @ 20 ml/h	89 mm
Lifetime	Min. 10 years under continuous duty conditions	152 mm
Article-No	Perfusor® Space: 8713030	8713030 Perfusor® Space

Space SmartBattery Pac	ks			
Type of unit	High capacity SmartBattery Perfusor® Space, SpaceCom a	'	e,	
Handling	Simple tool-free replacemen	t by opening the cover of	the battery compartmen	nt los
Cells	Four 1.8 Ah NiMH cells			
Electronics	Discreet processor / memory discharging cycle	Discreet processor / memory PCB that monitors and controls the charging / discharging cycle		
Status		Visualisation of the actual status as icon in the main screen (">10 %, ">50 %" or ">80 %" of the battery capacity) and as remaining time in hours and minutes		
Recharging time		Approx. 3 hours for 80 % of the operation time Approx. 6 hours for 100 % of the capacity		
Mechanism to extend battery lifetime		Processor PCB controls the temperature of the cells Embedded battery maintenance software		
Article-No	Battery Packs (SP) without Wireless: with Wireless:	with pin 8713180A 8713182A	without pin 8713180 8713182	8713180A Battery Pack SP with fixation pin

			<u>^</u>
Type of unit	High capacity SmartBattery Pack supply for up to 3 Space pumps	for Infusomat® Power Supply Space: Voltage	
		que for fast fixation of stacks of up to 3 Space	
	pumps		8713130 Space PoleClamp
Fixation	PoleClamp can be attached to inf mm) as well as horizontal wall ra	fusion poles and vertical tubes (diameter 16–40 iil systems accord. to EN1789	
Moisture protection	Power Supply: protected from spl	lash water, IP67	
Voltage	100-240 V AC +/-10 % = 90-264	4 V AC, 50/60 Hz	Power Supply/Adapter
Power Supply Versions	Euro, UK, USA, China, Australia, S	South Africa, Denmark, Korea	—
Cable length	2 m		
Accessories	8713133 Combi Lead 12 V – to cor 8713135 Short infusion stand for S	nnect up to 3 Space pumps to one power supply; Space PoleClamp	
Article-No	Space PoleClamp:	8713130	
	Combi Lead 12 V:	8713133	8713133 Combi Lead 12 V

Ambulance cars, helicopters and jets						
Туре	12 V adapter cable to connect up to 3 Space pumps to the onboard supply system of ambulance cars, helicopters or jets					
Certificates for pumps incl. accessories	EN 1789 Type B: Emergency Ambulance EN 1789 Type C: Mobile Intensive Care Unit EN 13718-1: Air, water and difficult terrain ambulance					
Power consumption	Max. 20 W for 3 pumps	8713231 On-board 12 V supply				
Accessories	8713231 On-board 12 V supply					
Article-No	On-board 12 V supply: 8713231					

# **Technical Data**

SpaceStation, SpaceCove	er Standard, SpaceCover Comfort	
Type of Device	Modular stackable rack (SpaceStation) for any combination of up to 4 Infusomat® Space or Perfusor® Space	82 mm
	SpaceCover Standard as roof of the upper SpaceStation.	261 mm
	SpaceCover comfort with central optical and acoustic operation status indicator. Central adjustable volume of the alarm signals.	158 mm
Weights	SpaceCover Comfort: 0.9 kg SpaceCover Standard: 0.6 kg SpaceStation: 3.6 kg SpaceStation with SpaceCom: 4.1 kg	
Expandability	Tool-free assembly of up to 6 Space Stations (6 x 4 slots) in one, two or three pillars	328 mm
Fixation	Universal clamp can be attached to infusion poles (diameter 16-40 mm) as well as horizontal wall rail systes accord. to EN1789	
Moisture protection	IP22, drip protected for horizontal usage	285 mm
Power supply system	Built-in AC adapter. Standard mains cord for non-heating apparatus, rubber connector Primary: 100-120 V AC $\sim$ 50/60 Hz, 200-240 V AC $\sim$ 50/60 Hz, 110V 0.6 A/220 V 0.3 A; Secondary: 12V DC/35 W	
Battery operating time	SpaceCoverComfort: ~ 26 hrs SpaceCom without WLAN: ~ 3 hrs @ one battery SpaceCom without WLAN: ~ 5 hrs @ two batteries SpaceCom with WLAN: ~ 2 hrs @ one battery SpaceCom with WLAN: ~ 3.5 hrs @ two batteries	328 mm
Operating Temperature	+10° C + 40° C +50° F +105° F	285 mm
Article-No	SpaceCover Standard: 8713147 SpaceCover Comfort: 8713145 SpaceStation: 8713140 SpaceStation incl. SpaceCom: 8713142 SpaceCom Retrofitting kit: 8713160 PoleClamp SPS 34521151	PoleClamp SPS

Accessories			
Article-No	Extension lead 60 cm: Extension lead 120 cm: Extension lead 10 m: Extension lead 15 m: Space SmartBattery Pack:	8713210 8713215 8713315 8713415 8713180	

SpaceStation MRI		
Type of unit	MRI system rack (MR conditional) for the connection of up to 4 Space infusion pumps (syringe and volumetric)	
Dimensions	60 x 62 x 195cm (WxDxL)	
Weight	50kg	
Ingress Protection Marking	IP 22	Weight: app. 40 kg
Max. magnetic flux density	20mT = 200 Gauss Online vectorial measurement of the field components in three axes	1350 mm
Applicable key standards	IEC 60601-1 and IEC 60601-1-2	1350
Certificates	Siemens 3.0T (Trio, Verio); Siemens 1.5T (Avanto, Espree, Sonata, Symhony, ESSENZA); Philips 3.0T (Achieva, Intera) Philips 1.5T (Achieva, Intera, Gyroscan Philips 1.0T (Panorama); General Electric 3.0T & 1.5T (Signa, Excite)	
Mains power supply	100-240VAC; max. 80VA; 50/60Hz inlet connector for non-heating apparatus; rubber connector; type of battery: 2 x Battery-Pack SP (NiMH)	
Battery operating time	SpaceStation MRI approx. 10h; <i>Tesla<sup>Spy</sup></i> battery approx. 28 days; charging time: approx. 6h	Specification MDI
Lifetime	Min. 10 years under continuous duty conditions	SpaceStation MRI



# Notes

# Notes

# Prescribing Information

### Name of medicine

Glucose 5 g/100 ml B. Braun Vet Care solution for infusion for cattle, horse, sheep, goat, pig, dog and cat

### Pharmaceutical form

Solution for infusion

Clear, colourless or almost colourless aqueous solution, free from visible particles

### **POM Status**

To be supplied only on veterinary prescription

# List of active ingredients

100ml contains glucose monohydrate 5.5 g (equivalent to anhydrous glucose 5.0 g)

### List of excipients

Water for injections

### Indications for use

This product is administered by intravenous infusion for the treatment of dehydration, (in the absence of shock), in cattle, sheep, goats, pigs, horses, dogs and cats. It is used to replace water when it cannot be taken or retained orally. It can also be used to correct hypernatraemia (by replacing lost water) and to aid the correction of hyperkalaemia (through the promotion of insulin production which in turn causes potassium to move from plasma into cells). A glucose 5 g/100 ml infusion is not a significant calorie source but can provide transient improvement of hypoglycaemia.

Dosage, method of use and route of administration Intravenous use. Administer slowly via intravenous infusion. This product should not be administered at a rate in excess of

10 ml/kg bodyweight/hour, otherwise glycosuria and osmotic diuresis may result. Infusion rates should be calculated according to the presenting condition, bodyweight and degree of dehydration of the animal being treated. The total fluid volume to be administered should consider existing deficits, maintenance requirements and ongoing losses. IV fluids should be warmed up to body temperature prior to administration. Maintain aseptic precautions throughout administration. For single use only.

# Common adverse reactions, serious adverse reactions, precautions and contraindications

Do not administer to hyperglycaemic animals.

This product is unsuitable for the correction of hypotonic dehydration. Do not use in animals with pre-existing peripheral oedema caused by a reduction in intravascular oncotic pressure. This product is not suitable as a sole source of calorie requirements or as a substitute for oral or parenteral nutrition.

This product does not contain electrolytes. Closely monitor electrolyte and phosphate balance in patients undergoing infusion of this product and adjust treatment accordingly

This product should be used with particular caution in patients with the

- following conditions:
- Diabetes mellitus
- -Intracranial or intraspinal bleeding
- -Anuria
- -Addisons disease
- -Severe or long standing hypernatraemia should be corrected

In very rare cases administration of products by intravenous infusion may increase the risk of thrombosis.

Incompatibilities with certain antibiotics (e.g. beta-lactam antibiotics, tetracyclines, sulfadiazine sodium) and heparin are

Overperfusion can lead to overhydration, hypertension and extravascular fluid accumulation. Symptoms may include respiratory distress. The administration of excess glucose can lead to hyperglycaemia, glycosuria and polyuria.

# Special warnings

Please consult the SmPC for further information.

Basic / list price

Marketing authorisation number Vm 03551/4002

### Name and address of MAH

B. Braun Melsungen AG Carl-Braun Strasse 34212 Melsungen Germany

Date PI was created / revised

October 2019

# Prescribing Information

### Name of medicine

B. Braun Vetcare Hartmann's Lactated Ringers Solution for infusion for cattle, horse, sheep, goat, pig, dog and cat.

# Pharmaceutical form

Solution for infusion.

Clear, colourless, aqueous and free from bacterial endotoxins

To be supplied only on veterinary prescription

List of active ingredients 100ml contains: Sodium chloride 0.600 g Potassium chloride 0.040 g Calcium chloride dihydrate 0.027 g Sodium (S)-lactate 0.312 q

(as sodium lactate solution (50% w/v) 0.624 g)

# List of excipients

Water for injections

# Indications for use

- Isotonic dehydration
  Metabolic acidosis
- Hypotonic dehydration
- Maintenance of normal extracellular fluid levels
- Electrolyte replacement in burns

# Dosage, method of use and route of administration

Intravenous use. Do not inject intramuscularly

The volume and rate of infusion will depend upon the clinical condition, existing deficits of the animal, maintenance needs and continuing losses. Generally aim to correct hypovolaemia by 50 % initially (ideally over 6 hours but faster if necessary) and reassess by clinical examination. Deficits are generally in the range of 50 ml/kg (mild) to 150 ml/kg (severe). An infusion rate of 15 ml/kg/ bw/hour is recommended in the absence of shock (range 5-25 ml/kg/bw/hour). In shock, high initial infusion rates, up to 90  $ml/k_0^2/bw/hour, \ are \ needed. \ High \ infusion \ rates \ should \ not \ be continued for longer than 1 hour unless urine output is restored.$ The maximum infusion rate should be decreased in the presence of cardiac, renal and pulmonary disease. For single use only

# Common adverse reactions, serious adverse reactions, precautions and contraindications

This veterinary medicinal product contains calcium, thus an effect on the heart cannot be ruled out. The safety of the veterinary medicinal product has not been established during pregnancy or lactation. Use only accordingly to the benefit/risk assessment by the responsible veterinarian. No interaction with other medicinal products and other forms of interaction are known. Before administering this solution the clinical and biological data of the

animal have to be carefully examined.

Monitoring of serum electrolyte levels should be obliged in cases of electrolyte imbalances, such as hypertonic or hypotonic dehydration, or a single increase of one electrolyte (e.g. hyperchloraemia) as well. Furthermore monitoring of the acidbalance and the clinical condition of the animal should accompany the treatment with this veterinary medicinal product. This veterinary medicinal product should be used with caution in congestive heart failure, severe renal insufficiency and in animals treated with corticoids and derivates. Due to the potassium content of this solution it should be used prudently in severe renal impairment

Do not use in animals with:

- Alkalosis of any origin
- Oedema (hepatic, renal, or cardiac)Overhydration
- Hyperkalaemia, hypernatraemia, hyperlactataemia
- Hepatic insufficiency

This veterinary medicinal product is incompatible with Chlortetracycline, Amphotericin B and Oxytetracycline. Mixtures with additives and other drugs (e.g. oxalate-, phosphate- and carbonate-/hydrogen carbonate- containing ones) may cause incompatibilities. In the absence of compatibility studies, this veterinary medicinal product must not be mixed with other veterinary medicinal products.

Overdose may result in cardiovascular overload and pulmonary oedema, which can lead to following symptoms such as restlessness, coughing and polyuria.

In case overdose has occurred the rate of infusion should be drastically reduced or the infusion should be stopped

Consult the SPC for further information

Basic / list price £2.50 per 500ml £3.03 per 1000ml Marketing authorisation number Vm: 03551/4004

Name and address of MAH B. Braun Melsungen AG Carl-Braun-Strasse 34212 Melsungen Germany

Date PI was created / revised

# **Prescribing Information**

Name of medicine Sodium Chloride 0.9 g/100 ml B. Braun Vet Care solution for infusion for cattle, horse, sheep, goat, pig, dog and cat

# Pharmaceutical form

Solution for infusion

Clear, colourless aqueous solution, free of particles in suspension

# POM Status

To be supplied only on veterinary prescription

# List of active ingredients Sodium chloride 0.9 g

List of excipients Water for injections

### Indications for use

-States of dehydration and hypovolaemia

-Deficiency of sodium (hyponatraemia) and chloride (hypochloraemia)

- -Hypochloraemic alkalosis management
- -Vehicle solution for compatible drugs
- -External use for wound irrigation and moistening of compresses

# Dosage, method of use and route of administration

Administration by intravenous route. Topical use for wound irrigation and moistening

of compresses.

The dosage and duration of treatment must be adjusted according to the specific fluid and electrolyte requirements under control of a veterinarian to prevent any possible side effects due to overdose. High infusion rates should be avoided in cases of chronic hyponatraemia.

Maximum daily dosage: The dosage should be adjusted individually by the veterinary upon the clinical condition of the animal

### Maximum infusion rate:

Generally, it is recommended that the infusion rate should be adapted to the existing fluid deficit. Higher infusion rates are required in case of hypovolaemic shock (dog: up to 100 ml/kg b.w./h; cat: up to 60 ml/kg b.w./h; horse, cattle, neonate calf: 50 to 80 ml/kg b.w./h). In case of long-term intravenous infusion therapy 5 to 10 ml/kg.w./h should normally not be exceeded

Common adverse reactions, serious adverse reactions, precautions and contraindications

Intravenous infusion carries a risk of thrombosis. (Please see SPC section 4.10 for symptoms of overdose)

Do not use in animals with:

- Hypertonic dehydration Hypernatraemia
- Hyperchloraemia
- Hyperhydration
- Syndrome of oedema and ascites - In cases when sodium restriction are indicated

Use with caution in animals with cardiac or renal impairment as sodium overload may occur. The maximum infusion rate should be decreased in the presence of cardiac, renal and pulmonary

disease.
Use with caution post surgery/trauma as sodium excretion may be impaired.

Use with caution in animals with hypokalaemia.
Serum electrolyte levels, water and acid-base balance and the clinical condition of the animal should be closely monitored

during the treatment in order to prevent overdose, particularly in

cases of renal or metabolic changes.
This product should not be used for longer than is necessary to correct and sustain circulating volume. Inappropriate/excessive use may worsen or create a metabolic acidosis. The solution should be warmed to approximately 37 degrees C prior to the administration of large volumes, or if the administration rate is high, in order to avoid hypothermia

Overdose may lead to hypernatraemia, hyperchloraemia, hypokalaemia, cardiac decompensation, hyperhydration and metabolic acidosis. In these cases, the rate of infusion should be drastically reduced or even discontinued.

Please consult the SmPC for further information.

Special warnings

Marketing authorisation number Vm 03551/4005

Name and address of marketing authorisation holder B. Braun Melsungen AG Carl- Braun Strasse 34212 Melsungen Germany

Basic / list price £2.50 per 500ml £3.33 per 1000ml

Date of revision October 2019

# B. Braun Medical Ltd | VetCare | Thorncliffe Park | Sheffield | S35 2PW Tel 0114 225 9000 | Fax 0114 225 9111 | www.bbraun-vetcare.co.uk

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