



Hospital Care & OPM

MEA Product Summary

Index of contents

	Pages
Infusion Therapy	3 – 32
IV Fluids /	
Large & Small Volume Parenterals	
Protective Admixture Tools	
IV Administration	
Blood Transfusions	
Infusion Accessories	
Vascular Access & Injection	33 – 62
Peripheral Venipuncture	
Central Venous Catheters	
Syringes	
Needles	
Regional Anesthesia	63 – 90
Epidural / Spinal	
Peripheral Nerve Blocks	
Pain Therapy	
ICU- / OR-Systems	91 – 103
Infusion pumps, Accessories and Workstations	
Clinical Nutrition	104– 123
Parenteral Nutrition	
Enteral Nutrition	
Injectable Drugs	124 – 136
Antibiotics	
Anti-Coagulation Drugs	
Drugs for General and Local Anesthesia	
Infection Control	137 – 185
Skin & Wound Management	186 – 205
Diabetes Care	206 – 217
Urinary Care	218 – 244
Stoma Care	245 – 271

			Page
IV Fluids / Large Volume Parenterals	Ecoflac® plus	Standard IV solutions	5
Concomp	ConComp database		6
IV Fluids / Small Volume Parenterals	Aqua ad iniectabilia Sodium Chloride Potassium Chloride Calcium Gluconate Sodium Bicarbonate Glucose	Injection solutions and concentrates	7
Plasma Volume Replacement	Gelofusine®	Colloidal fluid based on modified fluid gelatin	8
	Gelaspan®	Fully plasma adapted gelatin	8
	Tetraspan®	Hydroxyethyl starch	9
	Ecoflac® Mix	Transfer cap	10
	Ecoflac® Connect	Transfer cap for safer fluid transfer	10
	Transofix®	Transfer spike	10
	FDC 1000	Fluid dispensing connector	10
	Sterifix®	Sterifix® filter straws	10
	Ecopin	Seal for injection ports	11
	SC 2000	Multi-ad syringe cap	11
Protective Admixture Tools	TEC 1000	Tamper-evident syringe cap	11
	PureSite	Closed Male Connector	12
		Dust Cover Cap	12
	Mini-Spike®	Withdrawal and injection spike	13
	Mini-Spike® V	Withdrawal and injection spike with valve	13
	Mini-Spike® 2	Swabable needle-free access valve	14
	Mini-Spike® 2 Filter	Swabable needle-free access valve	14
	Mini-Spike® 2 Chemo	Swabable needle-free access valve	14

			Page
	Closed System	Confirmation and Aseptic Non-Touch Technique	15
IV Administration Sets	Intrafix® SafeSet	The new IV administration set generation	16
	Intrafix® Primeline	Standard IV administration set	17
	Intrapur® Inline	For application of chemotherapeutic agents	18
	Medifix®	System for CVP measurement	18
	Cyto-Set®	For cytostatic preparation and application	19
	Exadrop®	Gravity IV flow regulator	20
	Dosifix®	Measured volume IV set	20
Blood Transfusion Sets	Sangofix®	Set for blood bags and bottles	21
	Sangopur®	With integrated 2-step filter	22
IV Accessories	Caresite®	Needle-free luer access device	23
	Safeflow	Needle-free infusion system	24
	Safsite®	Two-way valve	25
	Infuvalve® Back check valve	For more safety during parallel infusions	25
	Combi red, blue, white, purple	Combi stopper and closing cones	26
	Closing cone white	Stopper closing cones	26
	IN-stopper	Stopper with injection membrane	26
	Combifix®	Adapters	26
	Discofix® C	Drug-resistant stopcocks and manifolds	27
	Intrapur®	Infusion filters	28
	Infusion filters	Recommendations	29
	Sterifix®	Injection and aspiration filters	30
	LS-connectors / Extension lines Type Heidelberg/ Type Minimum Volume	Extension and connection sets	31
	Spiral-tubings	Extension and connection tubings	32

Ecoflac® plus – Infusion container for versatile use in the pharmacy and on the ward



User benefits

- Versatile use in the pharmacy and on the ward
- Protection from needlestick injuries through twin port cap
- Convenience in handling
- Safer than glass
- PE material compatible with all pharmaceuticals
- Safety through error resistant usage (e.g. label)
- Uncomplicated delivery and transport
- Space-saving storage
- Ecological and proper disposal

An extensive portfolio of standard and electrolyte IV solutions (plasma volume replacement solutions and ready-to-use drugs) are available in the B. Braun Ecoflac®plus IV container. Combining an ergonomic design with the features of the twin port cap system, the Ecoflac® plus IV container contributes to the prevention of some of the most common risks throughout the whole infusion therapy process.

	100 ml	250 ml	500 ml	1000 ml
Aqua ad iniectabilia	●	●	●	●
Gelaspan 4 %			●	
Gelofusine			●	
Glucose 5 %		●	●	●
Glucose 10 %			●	●
Glucose 20 %			●	
Glucose 5 % in NaCl 0.9 %			●	●
Hemohes 6 %			●	
Metronidazole	●			
NaCl 0.9 %	●	●	●	●
Paracetamol	●			
Potassium Chloride 0.15 %			●	●
Potassium Chloride 0.3 %			●	●
Ringer Lactate (Hartmann's Solution)			●	●
Ringer Solution			●	●
Sterofundin® ISO		●		

ConComp – How to know what is compatible to what



- ConComp® provides information about the compatibility and stability of injectable drugs and their active ingredients in infusion solutions, as carrier' diluents and in containers made from different types of material.
- Access to and use of the ConComp® database are free of charge to all registered medical professionals.
- ConComp® presents information from the literature and from B. Braun laboratories.

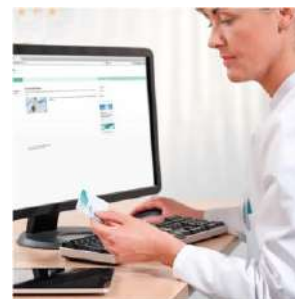
How to use the ConComp® database

Register:





1. Go to <http://www.concomp-partner.com>
2. If you have received one of the B. Braun ConComp® Cards, please enter your code once to create an account.
3. If you do not have a ConComp® Card yet, please contact your B. Braun representative or apply online.
4. Once registered, you have access to the database and you can look up information on the compatibility of I.V. drugs and/or their active ingredients with infusion solutions and the corresponding container materials.

Instructions for use:

1. Click: 'Drug' – Alphabetical order of generic names (e.g. Paclitaxel).
2. Click: 'Container' – Container materials in alphabetical order with the most frequently used materials on top of the list (e.g. PE).
3. Click: 'IV-Solution' – IV-solutions in alphabetical order with the most frequently used IV-solutions on top of the list. It is recommended to click 'all' in 2. and 3. in order to get presented the results for the selected drug in all containers and carrier solutions. With these 3 clicks the request is completed. The available articles are listed under 'Read'.
4. Click: 'Show Articles' – By clicking on the empty boxes next to the article.



Every day, numerous procedures are performed during patient care. Plastic ampoules have added safety and convenience to these routines. We are offering different types of plastic and glass containers:

	Article	Ecoflac® plus ml	Glass bottle ml	Glass vial ml	Mini Plasco® ml	Main indications
						
Injection solutions						
Drug diluents	Aqua ad iniectionabilia	100		100	5, 10, 20	Drug reconstitution
	0.9 % w/v Sodium Chloride	100		100	5, 10, 20	
Concentrates						
Sodium Chloride	5.85 % w/v Sodium Chloride				20	Hyponatraemia, Hypochloraemia, Hypotonic Hyperhydration
Potassium Chloride	7.45 % w/v Potassium Chloride				20	Hypokalaemia, as additive to parenteral nutrition solutions
	14.9 % w/v Potassium Chloride				10	
Calcium Gluconate	10 % w/v Calcium Gluconate				10	Hypocalcaemia, as additive to parenteral nutrition solutions
Potassium Phosphate	Potassium Phosphate				20	Hypophosphataemia, Hypokalaemia
Sodium Bicarbonate	8.4 % Sodium Bicarbonate		100		20	Metabolic acidosis
Glucose	50 % w/v Glucose			50	20	

Gelofusine® – A colloidal volume replacement fluid based on 4 % modified fluid gelatin



- Provides a wide range of therapeutic indications
- Provides a readily controllable volume effect over 3–4 hours
- Provides an immediate increase in intravascular volume and re-establishes disturbed haemodynamics
- Is completely degraded
- Degradation products are rapidly excreted
- Does not effect blood coagulation
- Is compatible with blood and blood products
- Has no substance, specific dose limit
- Lowers the risk of hyperchloremic acidosis due to the reduced, more physiological concentration of chloride ions

Therapeutic Indications

Colloidal plasma volume substitute for

- Prophylaxis and treatment of imminent or manifest relative or absolute hypovolaemia and shock;
- Prophylaxis and treatment of hypotension (e.g. during induction of epidural or spinal anaesthesia);
- Procedures involving extracorporeal circulation (e.g. heart-lung machine);
- Acute normovolaemic haemodilution

Container: Gelofusine® is supplied in polyethylene bottles (Ecoflac® plus, 500 ml) and PVC-free infusion bags (Ecobag®, 500 ml)
Sales Unit/ pcs. 10 per box

Gelaspan® – The fully plasma adapted gelatin



- Provides a physiologically balanced solution
- is isotonic: the osmolarity is similar to the plasma
- provides an appropriate and reliable hemodynamic stabilization comparable to that of modern starches

Therapeutic Indications

Gelaspan® is a colloidal plasma volume substitute in an isotonic, fully balanced electrolyte solution for

- Prophylaxis and treatment of imminent or manifest relative or absolute hypovolaemia and shock;

Container: Gelaspan® is supplied in polyethylene bottles (Ecoflac® plus, 500 ml) and PVC-free infusion bags (Ecobag®, 500 ml)
Sales Unit/ pcs. 10 per box

Tetraspan® 6 % / 10 % – Hydroxyethyl starch (130/0.42)



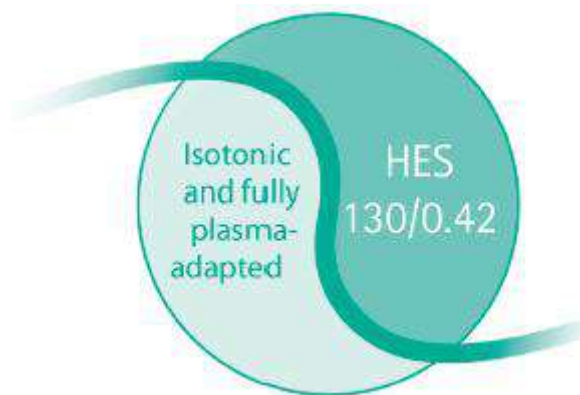
- Isotonic and fully plasma adapted solution
- Less influence on coagulation of calcium-containing solutions compared to saline based solutions.
- Rapid and reliable hemodynamic stabilization
- Fast and complete clearance
- No plasma accumulation
- Less risk for development of hyperchloremic acidosis
- Proven efficacy in neonates, toddlers and children
- Available as volume refiller (6 %) and volume expander (10 %)

Therapeutic Indications







Treatment of hypovolaemia due to acute blood loss.

Not all balanced solutions are the same!

	Plasma	Tetraspan®	NaCl 0.9%
Na ⁺ (mmol/l)	142	140	154
K ⁺ (mmol/l)	4.5	4	
Ca ²⁺ (mmol/l)	2.5	2.5	
Mg ²⁺ (mmol/l)	1.25	1	
Cl ⁻ (mmol/l)	103	118	154
HCO ₃ ⁻ /Acetate (mmol/l)	24	24	
Malate (mmol/l)		5	
Theoretical Osmolarity (mosmol/l)	291	296	308
Real Osmolarity ⁴ (mosmol/kg)	287	292	286



Container: Tetraspan® is supplied in polyethylene bottles (Ecoflac® plus, 500 ml, Sales Unit/ pcs. 10 per box) and PVC-free infusion bags (Ecobag®, 250 ml, 500 ml, Sales Unit/ pcs. 20 per box)

Article	Description	Sales Unit/ pcs.	Ref. no.	PVC-free	DEHP-, Latex-free	
Transfer Devices						
	Ecoflac® Mix	Transfer cap for transferring fluids between an Ecoflac® plus container and vials (cap ø: 20 mm). Convenient handling helps to improve aseptic technique. Shrouded spike.	250	16401	●	●
	 Ecoflac® Connect	Transfer cap for transferring fluids between an Ecoflac® plus container and vials in a closed-system (cap ø: 20 mm). Same benefits as Ecoflac® Mix and more: Protection for staff and patients through the closed-system. Reduced medication error since vial remains attached during infusion.	50	4090550	●	●
	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.	200	4090500	●	●
	FDC 1000	Fluid-dispensing connector for filling unit-dose syringes from a large master syringe. Provides a secure connection of two syringes. Luer-lock connections on both sides. Easy-to-use and minimizes contamination. Large grip plates. Easy air elimination from unit-dose syringe. Air is always located in the upper end of the master syringe.	100	415080	●	●
Filter Straws						
	Sterifix®	Sterifix® filter straw 5 µm, 4.5 cm. Short filter straw for withdrawal and filtration of fluids from small ampoules. Reduces risks of glass particle injection with glass ampoules. 5 µm filter hub attached. Prevents needle stick injuries. Blunt plastic straw. Very suitable for aspiration. Flexible straw can be angled.	200	4550250	—	●
		Sterifix® filter straw 5 µm, 10 cm. Long filter straw for withdrawal and filtration of fluids from large ampoules. Same as 4550250 but with 10 cm straw.	200	4550200	—	●





Article	Description	Sales Unit/ pcs.	Ref. no.	PVC-free	DEHP-, Latex-free
---------	-------------	------------------	----------	----------	-------------------

Dispensing Pins



Mini-Spike® / Mini-Spike® Filter / Mini-Spike® Chemo / Mini-Spike® 2 / Mini-Spike® 2 Filter / Mini-Spike® 2 Chemo
- for details see pages 13, 14

Admixture Accessories

	Ecopin	Original tamper-proof seal for the injection port after drug admixture, which prevents further manipulation.	1000	4125002	●	●
	SC 2000	Multi-ad Luer-Lock syringe cap (red). Onehand cap attachment. Blister pack stabilizes the cap on working surface.	50x10	418012	-	●
	TEC 1000	Tamper evident syringe cap,. Helps visual inspection of the use of the Luer-Lock syringe. Especially important when working with cytostatics or controlled substances. Onehand cap attachment designed with two pieces which break away upon manipulation.	50x10	418004	-	●
	PureSite	Closed Male Connector Dust Cover Cap - for details see next page -	100 200	4551102 4551103	●	●

PureSite – Closed Male Connector

Transfer-device for IV admixture & administration with a safer and easier protection against hazardous drug exposure



PureSite Closed Male Connector



PureSite Dust Cover Cap

PureSite Male Connector:

- Needle-free technology, bi-directional fluid flow
- Non-removable connection to syringe and / or IV set from female Luer-Lock connector
- Compatible with any standard Luer-Lock connection
- Male Luer-Lock designed with microbial ingress barrier
- Auto-closure technology upon disconnection
- Broad use of application with proven chemical compatibility of most commonly used hazardous drugs

PureSite Dust Cover Cap:

- Specially designed for PureSite
- Offers the comfort of a closing cap and safe drug transportation

Safety benefits

- Minimizes chemical and microbiological contamination
- Prevents from sharp injuries
- Intuitive needle-free handling

1. Safe Preparation



The permanent connection of PureSite prevents accidental disconnection from the syringe. Its automatic closure upon disconnection helps to reduce drug exposure and microbiological contamination.

2. Safe Transportation



PureSite is easy and safe to transport with its self-closed technology and protective Dust Cover Cap.

3. Safe Administration





PureSite needle-free and permanent connection assures a fast and safe drug administration.

4. Safe Disposal






PureSite technology assures a safe disposal as it remains permanently closed even after completion of the therapy.

Article	PVC-free	DEHP-free	Latex-free	Sales Unit/ pcs.	Ref. no.
 PureSite Closed Male Connector	●	●	●	100	4551102
 PureSite Dust Cover Cap	●	●	●	200	4551103

Mini-Spike® – Vented dispensing pin for injections and withdrawals from vials or semi-rigid containers



- For all conventional multi-dose containers with 3-1000 ml
- Needle-free technology
- Tight-sealing snap cap which protects contact contamination of the connector
- Integrated air vent making over-pressure release techniques unnecessary, excellent flow rate
- Easy handling and excellent hygiene for repeated withdrawal of fluids
- Color coding of the snap cap allows better differentiation
- *Micro-Tip*: with short length designed for smaller vials
- *Mini-Spike® Chemo*: with aerosol-retentive air filter which reduces the risk of contamination with toxic aerosols
- *Mini-Spike® V*: the integrated valve prevents the solution from leaking out after disconnecting the syringe

Article		Description	Sales Unit/ pcs.	Ref. no.	PVC-free	DEHP-, Latex-free
With 0.45 µm bacteria-retentive air filter						
Mini-Spike®		Standard Tip	50	4550242	●	●
Mini-Spike® Micro-Tip		Micro-Tip	50	4550510	●	●
Mini-Spike® V		Standard Tip with integrated valve	50	4550560	●	●
With 0.45 µm bacteria-retentive air filter and 5 µm particle filter						
Mini-Spike® Filter		Standard Tip	50	4550234	●	●
Mini-Spike® Filter Micro-Tip		Micro-Tip	50	4550528	●	●
Mini-Spike® Filter V		Standard Tip with integrated valve	50	4550579	●	●
With 0.2 µm aerosol-retentive air filter and 5 µm particle filter						
Mini-Spike® Chemo		Standard Tip	50	4550340	●	●
Mini-Spike® Chemo Micro-Tip		Micro-Tip without particle filter	50	4550536	●	●
Mini-Spike® Chemo V		Standard Tip with integrated valve	50	4550587	●	●

Mini-Spike® 2 – Vented dispensing pin with swabable needle-free access valve








Equivalent to the Mini-Spike® I version with the following improvements:

- Snap cap replaced by swabable needle-free access valve
- The swabable valve offers an easy and safe access of the connecting port for disinfection processes, which helps to reduce the risk of nosocomial infection
- The automatic closure technology increases protection against chemical contamination

Safety benefits

- Minimizes chemical and microbiological contamination
- Minimizes particulate contamination
- Prevents from sharp injuries
- Intuitive and convenient needle-free handling

	Article	Air Filter	Fluid Filter	PVC-, DEHP- and Latex-free	Sales unit	Ref. no.
	Mini-Spike® 2	0.45 µm	–	●	50	4550590
	Mini-Spike® 2 Filter	0.45 µm	5 µm	●	50	4550591
	Mini-Spike® 2 Chemo	0.2 µm	5 µm	●	50	4550592
<i>For a maximum risk reduction, the product system PureSite and Mini-Spike® 2 Chemo offers reliable solutions when it comes to toxic drug exposure and hospital-acquired infections. For details see page 12.</i>						
	PureSite Closed Male Connector	–	–	●	100	4551102
	PureSite Dust Cover Cap	–	–	●	200	4551103

Closed System Confirmation and Aseptic Non-Touch Technique



Closed System

The definition of a closed system was first published in an alert warning released by the American National Institute for Occupational Safety and Health (NIOSH). This warning was issued in relation to studies that showed a correlation between working with or near hazardous drugs in a healthcare environment and the increased risk of developing skin rashes, infertility, miscarriage and infant birth defects, as well as the possibility of developing leukemia and other forms of cancer. This NIOSH alert recommended that a closed system is to be used whenever hazardous drugs were to be handled.

A closed system is defined as "A device that does not exchange unfiltered air or contaminants with the adjacent environment".

Several products have been approved by external laboratories showing that the products are "closed systems" and therefore beneficial for patients as well as healthcare workers.

All corresponding products are marked with a special symbol / indicator.

A green rounded rectangular logo with the letters "ANTT" in white, bold, sans-serif capital letters.

ANTT

Aseptic Non-Touch Technique

The Association of Safe Aseptic Practice in the United Kingdom analyzed and evaluated B. Braun products regarding its capability for aseptic non-touch technique which is one key aspect in the prevention of microbial contamination. The valve Caresite® was considered to be an effective and user friendly device in terms of ANTT due to the following features:

- Facilitation of effective decontamination and disinfection due to the flush, flat and smooth surface of the injectable membrane.
- A relatively larger surface 'grip' area of the device and the device' overall shaping promotes effective non-touch technique.
- The use of a plastic protector cap on the male interface of the device protects the male end of the device from direct / indirect touch contamination from the immediate procedure environment and the healthcare worker.

This endorsement allows the B. Braun organization to differentiate from the competition and to use this in their marketing and sales activities.

Intrafix® SafeSet – Premium IV administration set with AirStop and PrimeStop



For gravity infusion and pressure infusion with defined, non-dedicated infusion pumps (pressure resistant up to 2 bar).

AirStop: an innovative, hydrophilic depth filter membrane ensuring AirStop safety in case of emptied fluid container. Maintains the tubing completely filled with fluid. Works further as a particle filter with a filtration efficiency of 15 µm and even lower.

PrimeStop: a protective cap lined with a bacteria-tight hydrophobic membrane placed on the Luer Lock fitting, stops fluid leaking and protects against contamination. PrimeStop automates priming and ends messy dripping.

User benefits

- Helps prevent air infusion and infusion-related infection
- Ensures a closed system during priming
- Significantly reduces work load
- Saves time and costs
- Advanced precise roller clamp
- DEHP-free

Article	Gravity / Pressure	Tubing length (cm)	Specifications	Sales Unit/ pcs.	Ref. no.	PVC-free	Latex-free
<i>Intrafix® SafeSet – with AirStop and PrimeStop</i>							
Intrafix® SafeSet	pressure	180	Basic	100	4063000	—	●
Intrafix® SafeSet	pressure	230	Basic	100	4063003	—	●
Intrafix® SafeSet B.C.V.	pressure	180	Infuvalve® B.C.V. (Back Check Valve)	100	4063001	—	●
Intrafix® SafeSet N.T.P.	gravity	180	Neutrapur®	100	4063002	●	●
Intrafix® SafeSet Y-N.F. Caresite™	pressure	210	Y-injection site with Caresite™ needle-free valve	100	4063004C	—	●
Intrafix® SafeSet UV-protect	pressure	180	Transparent UV-protection	100	4063131	●	●
Intrafix® SafeSet Y-N.F. Safeflow	pressure	210	Y-injection site with Safeflow needle-free valve	100	4063004	—	●
Intrafix® SafeSet	pressure	180	with	100	4063005	—	●
Intrafix® SafeSet 3-W.S.C.	pressure	220	with 3-Way stopcock	100	4063006	—	●

Intrafix® Primeline – Universal IV administration set



- Sharp and clear ISO spike
- Highly transparent dome design
- Elastic pump chamber
- Large fluid filter area
- Handy roller clamp with spike disposal
- Screw-tight luer lock fitting
- 15 µm filter
- Pressure resistant: 2 bar
- **DEHP-free**
- Good control flow rate. Comfortable to hold, more accurate setting of flow rate, easier to roll and finer drop speed adjustment

Intrafix® Primeline comes with a variety of add-ons e.g.:

- automate PrimeStop cap makes parallel pressure and gravity infusions safer (Back Check Valve),
- simplify injection (needle-free valve) and piggybacking procedures

Article	Gravity/ pressure	Tubing length (cm)	Specifications	Sales Unit/ pcs.	Ref. no.	PVC- free	Latex- free
Intrafix® Primeline	pressure	150	Basic	100	4062957	—	●
Intrafix® Primeline	pressure	180	Basic	100	4062981L	—	●
Intrafix® Primeline	pressure	230	Basic	100	4060407	—	●
Intrafix® Primeline	pressure	180	Primestop	100	4062982L	—	●
Intrafix® Primeline B.C.V.	pressure	180	Infuvalve® B.C.V. (Back Check Valve)	100	4063287	—	●
Intrafix® Primeline N.T.P.	gravity	180	Neutrapur®	100	4062191	●	●
Intrafix® Primeline Eurofix® I.S.	pressure	180	Injection site with grip plate	100	4062182	—	●
Intrafix® Primeline Safeflow	pressure	180	Y-injection site with Safeflow needle-free valve	100	4062158	—	●
Intrafix® Primeline Caresite®	pressure	180	Y-injection site with Caresite® needle-free valve	100	4062158C	—	●
Intrafix® Primeline UV Prot.	gravity	180	Transparent UV protection	100	0086774R	●	●
Intrafix® Primeline with Microdropper	gravity	180	Microdropper, Y-injection site	100	4052480	—	●

Intrapur® Inline – Infusion filter set for the application of chemotherapeutic agents



- Ready to use infusion set with 0.2 µm infusion filter
- Bacteria and particle retention
- Recommended period of use: 24 hours
- Reliable air venting regardless of position
- High flow volume

Article	Description	Sales Unit/ pcs.	Ref. no.	PVC- free	DEHP-, Latex- free
Intrapur® Inline	Inline filter set	20	4099842N	●	●

Medifix® – Infusion system for measurement of the Central Venous Pressure



- **Medifix® tube system:**
 - with or without IV administration set Intrafix® Primeline
 - Discofix® 3-way stopcock
 - bacteria-tight venting of manometer tube
 - screw-tight Luer-Lock fitting
- **Medifix® manometer scale:**
 - graduation from +35 to -15 cm H₂O
 - good readability for the measured value because of magnifying effect
 - zero-position indicator movable to either side
 - break-proof plastic
 - reusable
 - with two universal fixation clamps

Article	Description	IV Set	Sales Unit/ pcs.	Ref. no.	PVC- free	DEHP-, Latex- free
Medifix®	Short manometer tube, 100 cm	—	50	4276116	—	●
Medifix®	Long manometer tube, 180 cm	—	50	4276108	—	●
Medifix®	Short manometer tube, 100 cm	With Intrafix® Primeline, length of tubing 80 cm	50	4276620	—	●
Medifix®	Short manometer tube, 100 cm	With Intrafix® Primeline, length of tubing 145 cm	50	4276612	—	●
Medifix®	Long manometer tube, 180 cm	With Intrafix® Primeline, length of tubing 80 cm	50	4276728	—	●
Medifix®	Manometer scale	—	10	4279913	●	●

Cyto-Set® – IV set for safer cytostatic preparation and application



- Closed system from preparation and application to disposal
- All connection sites are free of cytostatic drugs
- Easy, drip-free priming
- Needle-free system
- The Safsite® connectors prevent leaks and needlesticks
- PrimeStop with rotating Luer-lock connector eliminates the risk of cytostatic contamination at the connection site
- *Cyto-Set® Mix*: Safe drug preparation in the pharmacy
- *Cyto-Set® Line*: Connects primed solutions
- *Cyto-Set® Infusion / Infusomat® Space*: Safe drug application on the ward

	Article	Type	Light protection	Sales Unit/ pcs.	Ref. no.
	<i>Preparation</i>				
	Cyto-Set® Mix	with 1 needle-free valve	—	20	A2900N
	Cyto-Set® Mix	with 1 needle-free valve, with 0.2µm filter	—	20	A2903N
	Cyto-Set® Mix	with 1 needle-free valve	●	20	A2906N
	Cyto-Set® Line	without 1 needle-free valve	—	20	A2581NF
	Cyto-Set® Line	Without needle-free valves, with 0.2µm filter	—	20	A2582NF
	<i>Application (for gravity infusion)</i>				
	Cyto-Set® Infusion	with 3 needle-free valves		20	A1687
	Cyto-Set® Infusion	with 5 needle-free valves and AirStop membrane		20	A1686SNF
	<i>Application (for Infusomat® Space pump)</i>				
	Cyto-Set®	with 3 needle-free valves	—	20	8250917SP
	Cyto-Set®	with 5 needle-free valves	—	20	8250817SP
	Cyto-Set®	with 3 needle-free valves	●	20	8250920SP
	Cyto-Set®	with 5 needle-free valves	●	20	8250820SP
	Cyto-Set®	with 5 needle-free valves, with 0.2µm filter	—	20	8250414SP
	Cyto-Set® Pump adapter	with 4 needle-free valves,	—	20	A1673S0

Exadrop® – Precision IV flow regulator for gravity infusion



- Saves frequent readjustment
- Easy optimization of the IV infusion rate
- Control of the flow volume independent of the tubing
- Exact reproducibility of infusion rate adjustments for restarting infusions
- Slide clamp for short-term interruption of infusion
- Screw-tight Luer-Lock fitting

Article	With I.V. Set Intrafix® Primeline	Tubing length (cm)	Specifications	Sales Unit/ pcs.	Ref. no.	PVC-free	Latex-free
Exadrop®	●	180	W/o injection site	50	4061284	—	●
Exadrop® Neutrapur®	●	150	PVC-free tubing, w/o injection site	50	4062264	●	●
Exadrop® Safeflow	●	150	Y-injection site with Safeflow® needle-free valve	50	4061276	—	●
Exadrop® Inline	—	54		50	4061306	—	●

! The scale values serve as a guide and refer to an infusion with 0,9% NaCl solution using a Vasofix® G18 Braunüle IV cannula and a difference in height of 76 cm between the I.V. container and the patient. Other conditions will result in different values. Therefore, it is absolutely necessary to monitor the drip rate by comparison checks.

Dosifix® – Volume control IV administration set with dosage burette



- Universal, vented piercing spike
- Bacteria-tight proven air vent, closable with snap cap
- Dosage container 150 ml, with fine graduation and injection site (latex)
 - automatic shut-off swim valve to prevent air embolism
 - micro dropper, 20 drops = 1 ml ± 0.1 ml (aqua dist.)
 - flexible lower part of drip chamber
 - 15 µm fluid filter
- Two roller clamps with piercing-spike covering
- Y-injection site
- Screw-tight Luer-Lock fitting

Article	Tubing length (cm)	Specifications	Sales Unit/ pcs.	Ref. no.	PVC-free	Latex-free
Dosifix®	180	needle-based Y-injection site	25	4037014	—	●

Sangofix® / Sangofix® Air – Blood administration set



- With 200 µm blood filter basket in drip chamber
- Fully transparent dome offers visibility for accurate flow rate measurement
- Elastic pump chamber allows easy and quick set-up of fluid level
- Flexible drip chamber with high fluid level, rapid and easy adjustment of fluid level
- Roller clamp with piercing-spike covering

Article	Description	Tubing length (cm)	Filter area	Sales Unit/ pcs.	Ref. no.	PVC-free	DEHP-, Latex-free
Sangofix®	Non-vented blood administration set for blood bags, Spinlock, PrimeStop	150	11 cm ²	100	4117301	–	●
	Non-vented blood administration set for blood bags	180	11 cm ²	100	4034228	–	●
Sangofix® Air	Vented blood administration set for glass bottles	180	11 cm ²	100	4116011F	–	●

Sangopur® – Blood administration set



- 2-step filter mesh width 80/40 µm
- Convenient drip chamber design with highly transparent upper part
- Extended, detached drip element provides even drop formation
- Flexible drip chamber with high fluid level, rapid and easy adjustment of fluid level
- Roller clamp with piercing-spike covering
- Screw-tight Luer-Lock fitting
- DEHP-free

Article	Description	Tubing length (cm)	Filter area	Sales Unit/ pcs.	Ref. no.	PVC-free	DEHP-, Latex-free
Sangopur®	Non-vented blood administration set for blood bags	150	10/22 cm ²	50	4146581	—	●

Sangopur® Paed-Set



- With 40 µm blood filter
- Female luer-lock connector
- Fully transparent dome offers visibility for accurate flow rate measurement
- Elastic pump chamber allows easy and quick set-up of fluid level
- Flexible drip chamber with high fluid level, rapid and easy adjustment of fluid level
- DEHP-free

Article	Description	Tubing length (cm)	Filter area	Sales Unit/ pcs.	Ref. no.	PVC-free	DEHP-, Latex-free
Sangopur® Paed-Set	Vented blood administration set for glass bottles	4	11 cm ²	100	4146492	●	●

Caresite® – Luer Access Device

For safe and convenient access in infusion therapy.

CLOSED
SYSTEM

ANTT

User benefits

Protects against microbiological contamination

- Smooth, swabable surface
- Clear design
- Open fluid path

Prevents catheter occlusion

- Positive displacement (valve design)

Ease of use

- High pressure resistant
- Easy to access
- Drug compatible (lipids and cremophor)

Easy to visually inspect.



Easy to clean.










Easy to grip.



Easy to connect.



	Description	Length (cm)	Priming volume (ml)	Tubing Inner Ø (mm)	PVC-free	DEHP, Latex-free	Sales Unit/ pcs.	Ref. no.
	Caresite® Luer Access Device	-	0.22	-	●	●	200	415122-01
Extension Sets with Caresite® valve								
	Small bore extension set with Caresite®, Spinlock (high pressure - for power injectors)	20	0.5	1.3	●	●	100	470100-01
	Standard bore extension set with Caresite®, Spinlock	15	0.9	2.8	●	●	100	470108-01
	Small bore double extension set with 2 Caresite®, Spinlock	18	0.9	1.3	●	●	50	470106-01
	Small bore double extension set with 2 Caresite®, 2 BCV, Spinlock	22	1.6	1.3	●	●	100	470182
	Small bore triple extension set with 3 Caresite®, Spinlock	20	1.3	1.3	●	●	50	470160
	Small bore triple extension set with 3 Caresite®, 3 BCV, Spin-Lock	22	2.0	1.3	●	●	50	470161

Safeflow – Needle-free infusion system

The valve that makes infusion so simple!



**CLOSED
SYSTEM**

- Allows convenient and safe needle-free access for injection, aspiration or parallel infusions as a closed system.
- Compatible with Luer-Slip and Luer-Lock
- Suitable for all IV systems
- Swabable

Product Type	Description	PVC-free	DEHP-free	Latex-free		Sales Unit/ pcs.	Ref. no.
--------------	-------------	----------	-----------	------------	--	------------------	----------



Safeflow valve, blue



50

409100H



Safeflow valve, red



50

409110H

Product Type	Description	PVC-free	DEHP-free	Latex-free	Tubing length (cm)	Sales Unit/ pcs.	Ref. no.
--------------	-------------	----------	-----------	------------	--------------------	------------------	----------



Smallbore Extension Set with Safeflow valve



10

50

4097154



Smallbore Y-Extension Set with two Safeflow valves



12

50

4097145



Smallbore Y-Extension Set with two Safeflow valves and back-check valve



12

50

4097148



Luer-Lock



Luer-Slip

Safsite® – Safety connector for infusion systems



- Automatic mechanism allows safer and needle-free access
- Safsite® can be connected to infusion and transfusion administration sets, tubings and lines, stopcock systems, central venous catheters, IV catheters and cannulas
- For administering drugs, for taking blood, for infusion solutions
- Connection of a syringe or an infusion line to Safsite® safety connector simultaneously opens the system and establishes a safe access

Product name	Description	Sales Unit/ pcs.	Ref. no.	PVC-, DEHP- and Latex-free
Safsite®	Safety connector with blue cap	100	4091000	●








Infuvalve® Back Check Valve – Against Fluid Backflow during IV Therapy



- A normally closed valve, to be opened with low pressure
- Prevents backflow of fluid/blood into IV infusion line
- Performs against over- and under-dosage as well as against bolus infusions
- Maintains alarm function of pumps
- Functions in all positions

Product name	Without air vent	With built-in air vent	Tubing length (cm)	Sales Unit/ pcs.	Ref. no.	PVC-, DEHP- and Latex-free
Infuvalve® B.C.V. for parallel infusions	●			50	4094000N	●
Intrafix® Primeline, Infuvalve® B.C.V.		●	180	100	4063287	●
Intrafix® SafeSet, Infuvalve® B.C.V.		●	180	100	4063001	●































































Closing cones, IN-Stopper, adapters and connectors

Article		Description	Sales Unit/ pcs.	Ref. no.	PVC-, DEHP- and Latex-free
Combi-stopper closing cones					
	Combi red	Universal stopper to close female and male luer access ports	1000	4495101	●
	Combi blue		1000	4495152	●
	Combi white		1000	4495209	●
		Combi purple	Universal stopper to close female and male luer access ports and differentiate enteral nutrition systems	1000	4495102
Stopper closing cones					
	Closing cone	Closing cone, luer-lock fitting	1000	4097076	●
IN-stopper for injections through injection membrane					
	IN-Stopper	With hygienic outer surface, contact-free luer taper, priming volume 0.16 ml	1000	4238010	●
Adapters					
	Combifix®	Female / female	1000	5206634	●
	Combifix®	Male / male	1000	5206642	●
	Combifix®	Luer female / Rekord male	1000	4090306	●

Discofix® C – The stopcock and manifold that resist stress cracking



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

Stopcocks Drug Resistant	Color	Rotating adapter	Proximal Stopcock	Extension (cm)	Sales Unit/ pcs.	Ref. no.	PVC- free	DEHP-, Latex-free
Discofix® C 3-way stopcocks 		●			100	16494C	●	●
		●			100	16495C	●	●
		●			100	16496C	●	●
		●			100	16497C	●	●
		●		10	50	16500C	—	●
		●		10	50	16501C	—	●
		●		25	50	16520C	—	●
		●		50	50	16540C	—	●
		●		75	50	16551C	—	●
		●		100	50	16560C	—	●
Discofix® C 3-way stopcocks with Safeflow 		●			100	16494CSF	●	●
		●			100	16495CSF	●	●
		●		10	50	16500CSF	—	●
		●		10	50	16501CSF	—	●
		●		25	50	16520CSF	—	●
		●		50	50	16540CSF	—	●
		●		75	50	16551CSF	—	●
		●		100	50	16560CSF	—	●
Discofix® C 3-gang manifolds 	  	●			50	16600C	●	●
	  	●			50	16605C	●	●
	  	●	●	180	50	16611C	—	●
	  	●	●	150	50	16610C	—	●
	  	●		150	50	16615C	—	●
Discofix® C 5-gang manifolds 	    	●			40	16608C	●	●
	    	●			40	16609C	●	●
	    	●		150	40	16612C	—	●
	    	●	●	150	40	16613C	—	●
	    	●	●	180	40	16614C	—	●

Intrapur® – Infusion filters

Intrapur® Plus
Intrapur® Paed
Intrapur® Neonat



- 0.2 µm filter
- Positively charged
- Bacteria retention
- Endotoxin retention
- Fungi retention
- Particle retention
- Air elimination
- Latex-free, DEHP-free

Intrapur® Lipid
Intrapur® Paed Lipid
Intrapur® Neonat Lipid








- 1.2 µm filter
- Low protein binding
- Fungi retention
- Particle retention
- Air elimination
- Latex-free, DEHP-free

Article	Filtration area (cm²)	Flow rate (aqua dist., ml/min)	Filling volume		Tubings Ø (mm)	Max. operation Pressure of Filter housing	Time of use recommended	Sales Unit/ pcs.	Ref. no.
			Filter housing (ml)	total incl. tubing (ml)					
Intrapur® Plus, Intrapur® Paed, Intrapur® Neonat (0.2 µm filter)									
Intrapur® Plus	10	> 30	2.4	3.46	PVC* 2x4.1	3.1	96 h	50	4099800
Intrapur® Plus	10	> 30	2.4	4.54	PUR 3x4.1	3.1	96 h	50	4183916
Intrapur® Paed	4.5	> 10	0.7	1.19	PVC* 1.2x2.2	3.1	96 h	50	4099753
Intrapur® Neonat	1.65	> 2	0.4	0.79	PUR 1x2.35	5.2	96 h	50	4099451
Intrapur® Neonat	1.65	> 2	0.4	0.68	PUR 1x2.35	5.2	96 h	100	4185226
Intrapur® Lipid, Intrapur® Paed Lipid, Intrapur® Neonat Lipid (1.2 µm filter)									
Intrapur® Lipid	10	> 100	2.4	3.46	PVC* 2x4.1	3.1	24 h	50	4099702
Intrapur® Paed Lipid	4.5	> 90	0.7	0.7	No tubing	3.1	24 h	50	4093216
Intrapur® Paed Lipid	4.5	> 90	0.7	1.19	PVC* 1.2x2.2	3.1	24 h	50	4099850
Intrapur® Neonat Lipid	1.65	> 30	0.4	0.76	PUR 1x2.35	5.2	24 h	50	4099460

PVC* = PVC (DEHP-free)

Infusion filters – Recommendations

Solutions	Infusion filters	
Crystalloids / Drugs e.g. Sterofundin, Ringer, Sod. Chloride, Glucose, Amino acids	Intrapur® plus 0,2 µm, positively charged	
Lipids, e.g. Lipofundin, Lipidem	Intrapur® Lipid 1,2 µm	
Antibiotics	Intrapur® plus 0,2 µm, positively charged	
Volume Replacement, e. g. Gelatine	Intrapur® Lipid 1,2 µm or Intrapur® 0,2 µm via pressure infusion	
Blood	No infusion filter	
Cytostatics, e.g. Taxol	Sterifix 0,2 µm, non-charged	

Sterifix® – Infusion filters

Sterifix®

Sterifix® Paed

Sterifix® Neonat





- 0.2 µm filter
- Low protein binding
- Bacteria retention
- Fungi retention
- Particle retention
- Air elimination
- Latex-free, DEHP-free








Article	Filtration area (cm²)	Flow rate (aqua dist., ml/min)	Filling volume		Tubings ø (mm)	Max. operation Pressure of Filter housing	Time of use recommended	Sales Unit/ pcs.	Ref. no.
			Filter housing (ml)	total incl. tubing (ml)					
Sterifix® Sterifix® Paed, Sterifix® Neonat (0.2 µm filter)									
Sterifix®	10	> 30	2.4	3.46	PVC 2x4.1	3.1	24 h	50	4099303
Sterifix®	10	> 30	2.4	4.54	PUR 3x4.1	3.1	24 h	50	4184637
Sterifix® Paed	4.5	> 10	0.7	0.7	No tubing	3.1	24 h	50	4099354
Sterifix® Neonat	1.65	> 2	0.4	0.76	PUR 1x2.35	5.2	24 h	50	4099257




PVC* = PVC (DEHP-free)

Sterifix® – Injection and aspiration filters

Article	Particle retention	Bacteria retention	Special features	Pore size	Sales Unit/ pcs.	Ref. no.
Sterifix® injection filter 	●	●	Suitable as syringe filter Lock fitting	0.2 µm	200	4099206
Sterifix® Pury 	●		Suitable as syringe filter Lock fitting	5 µm	100	4551001

Extension sets

Article	Tubing length (cm)	Priming volume (ml)	Inner Ø (mm)	Latex-, DEHP-free	Description	Sales Unit/ pcs.	Ref. no.
<i>LS-connectors</i>							
	LS-2	15	1.6	3.0	●	Two flexible connectors	100 4097122
	LS-4	35	4.5	3.0	●	Four flexible connectors, roller clamp	100 4097149
	LS-5	35	2.5	3.0	●	Five rigid connectors, IN-Stopper, roller clamp	100 4097157
<i>Connection tubing with injection port</i>							
	14	1.1	3.0	●	With needle-free injection port	100	4247116
<i>Back-check valve extension set</i>							
	20	1.8	3.0	●	Two flexible connectors with back-check valves	100	471980
<i>Extension lines Type Heidelberg</i>							
	30	2.1	3.0	●		100	4097300
	75	5.3	3.0	●		100	4097173
	100	7.1	3.0	●		100	4097262
	140	9.9	3.0	●		100	4097408
	190	13.4	3.0	●		100	4097190
	320	22.6	3.0	●		100	4097130
<i>Extension lines Type Minimum Volume</i>							
	30	0.3	1.2	●	Luer-slip connector	100	4256000
	30	0.3	1.2	●	Luer-lock connector	100	4256034
	30	2.0	0.9	●	Luer-lock connector	100	9500049

Article	Inner Ø (mm)	Tubing length (cm)	Color	Sales Unit/ pcs.	Ref. no.
<i>Single lumen</i>					
	1 mm	150	<input type="checkbox"/>	50	4092937
	1 mm	300	<input type="checkbox"/>	50	4092945
	1 mm	500	<input type="checkbox"/>	50	4092953
	1 mm	700	<input type="checkbox"/>	50	4092961
	1 mm	850	<input type="checkbox"/>	50	4092970
	2 mm	150	<input type="checkbox"/>	50	4090365
	2 mm	300	<input type="checkbox"/>	50	4090373
	2 mm	500	<input type="checkbox"/>	50	4090438
	2 mm	700	<input type="checkbox"/>	50	4090381
	2 mm	850	<input type="checkbox"/>	50	4090390
<i>Double lumen</i>					
	1 mm	300	<input checked="" type="checkbox"/> <input type="checkbox"/>	50	4091736
	1 mm	300	<input checked="" type="checkbox"/> <input type="checkbox"/>	50	4091752
	1 mm	700	<input checked="" type="checkbox"/> <input type="checkbox"/>	50	4093607
	1 mm	850	<input checked="" type="checkbox"/> <input type="checkbox"/>	50	4091728
	2 mm	300	<input checked="" type="checkbox"/> <input type="checkbox"/>	50	4093830
	2 mm	500	<input checked="" type="checkbox"/> <input type="checkbox"/>	40	4093850
	2 mm	700	<input checked="" type="checkbox"/> <input type="checkbox"/>	30	4093870
	2 mm	850	<input checked="" type="checkbox"/> <input type="checkbox"/>	25	4093885
<i>Triple lumen</i>					
	1 mm	150	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	50	4093115
	1 mm	300	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	50	4093130
	1 mm	500	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	50	4093150
	1 mm	700	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	50	4093170
	1 mm	850	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	50	4093185
	2 mm	150	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	50	4093215
	2 mm	300	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	50	4093230
	2 mm	500	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	40	4093250
	2 mm	700	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	25	4093270
	2 mm	850	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	25	4093285
Lengths	150 cm	300 cm	500 cm	750 cm	850 cm
Diameter 2 x 3.2 mm / Filling Volume	4.7 ml	9.9 ml	15.7 ml	22 ml	26.7 ml
Flow Rate ml/min (BS)	ca. 61	ca. 40	ca. 28	ca. 20	ca. 17
Diameter 1 x 1.9 mm / Filling Volume	1.2 ml	2.3 ml	3.9 ml	5.5 ml	6.6 ml
Flow Rate ml/min (BS)	ca. 6.0	ca. 3.5	ca. 2.5	ca. 1.7	ca. 1.5










			Page
Peripheral Venipuncture	Vasofix® Safety	Shielded IV catheter with injection port	34
	Introcan Safety®	Shielded IV catheter without injection port	35
	Venofix® Safety	Safety Venipuncture Set	36
	Vasofix®	IV cannula with injection port	37
	Introcan®	IV cannula without injection port	38
	Venofix®	Venipuncture set	39
Syringes	Injekt®	2-piece single-use syringes 1 – 20 ml	40
	Omnifix®	3-piece single-use syringes 1 – 100 ml	41
Needles	Sterican®	Hypodermic needles	43
	Sterican® Mix	Drug admixture needles	45
	Kink-proof guide wire and Valve Needle	The ultimate tool for safe catheter placement	46
	Certofix® protect	Antipathogenic central venous catheter for long-term protection against catheter infection	47
Certofix® Basic Sets	Certofix® Mono	Single lumen Seldinger sets with selected components	49
	Certofix® Duo/Trio	Multi-lumen Seldinger sets with selected components	50
Certofix® Prime Sets for OR and ICU	Certofix® Mono	Comprehensive single lumen catheter sets (Seldinger method)	51
	Certofix® Duo/Trio	Comprehensive multi-lumen catheter sets (Seldinger method)	52
	Certofix® Quattro/Quinto	Comprehensive multi-lumen catheter sets (Seldinger method)	53
Certofix® Prime Sets for High Flow Infusion	Certofix® Duo HF/Trio HF	Double/Triple lumen high flow (HF) catheter sets	54
Certofix® Sets for Pediatrics	Certofix® Mono Paed	Single lumen catheter sets for pediatrics and neonatology (Seldinger method)	55
	Certofix® Duo/Trio Paed	Multi-lumen catheter sets for pediatrics (Seldinger method)	56
ECG Lead Technique	Certodyn® Universal Adapter and Alphacard®	Verification of catheter tip position	57
Cavafix®	Cavafix® MT/Certo® Mono	Single lumen "Catheter-through-cannula" central venous catheter	58
	Cavafix® Duo	Double lumen "Catheter-through-cannula" central venous catheter	59
	Cavafix® Splittocan®	Single lumen "Catheter-through-cannula" with splittable introducer needle	60
	Cavafix® Certodyn®	Single lumen "Catheter-through-cannula" with guide wire for intra-atrial ECG lead	61
Measurement Units for Catheter		Gauge/French or Charriere Conversion	62

Vasofix® Safety – Shielded IV Catheter with injection port

Protects you and your healthcare team against needlestick injuries and related infections.



- Complete portfolio for every vein condition, puncture site and patient age in two material types (FEP + PUR)
- Easy puncture at a wide range of angles because of optimized back cut bevel
- Minimum effort of catheter insertion
- Self-activating clip-technology => covers needle tip automatically after use
- Hygienic injection of medication via injection port without an extra needle or risk of needlestick injury
- PVC-free, latex-free

Color	Size		Vasofix® Safety		Stylet
	G	Ø mm	FEP	PUR (Certon®)	
 yellow	24 x 3/4"	0.7 x 19	—	4269071S-01	—
 blue	22 x 1"	0.9 x 25	4268091S-01	4269098S-01	4215095
 pink/white	20 x 1"	1.1 x 25	—	4269217S-01	4215117
 pink	20 x 1 1/4"	1.1 x 33	4268113S-01	4269110S-01	4219104
 green/white	18 x 1 1/4"	1.3 x 33	4268334S-01	4269330S-01	4219139
 green	18 x 1 3/4"	1.3 x 45	4268130S-01	4269136S-01	4219120
 white	17 x 1 3/4"	1.5 x 45	4268156S-01	4269152S-01	4215150
 grey	16 x 2"	1.7 x 50	4268172S-01	4269179S-01	4219171
 orange	14 x 2"	2.2 x 50	4268210S-01	4269225S-01	4219201

Introcan Safety® – Shielded IV Catheter

Protects you and your healthcare team against needlestick injuries and related infections



- Complete portfolio for every vein condition, puncture site and patient age in two material types (FEP + PUR)
- Easy puncture at a wide range of angles because of optimized back-cut bevel
- Minimum effort of catheter insertion
- Self-activating clip technology => covers needle tip automatically after use
- PVC-free, latex-free

Color	Size		Straight or Winged	Introcan Safety®		Stylet
	G	Ø mm		FEP	PUR (Certon®)	
yellow	24 x 3/4"	0.7 x 19	S	4252500-01	4251601-01	—
yellow	24 x 3/4"	0.7 x 19	W	4254503-01	4253523-01	—
blue	22 x 1"	0.9 x 25	S	4252519-01	4251628-01	4214099
blue	22 x 1"	0.9 x 25	W	4254511-01	4253540-01	4214099
pink/white	20 x 1"	1.1 x 25	S	4252543-01	4251652-01	—
pink/white	20 x 1"	1.1 x 25	W	4254546-01	4253574-01	—
pink	20 x 1 1/4"	1.1 x 32	S	4252535-01	4251644-01	4214110
pink	20 x 1 1/4"	1.1 x 32	W	4254538-01	4253566-01	4214110
pink	20 x 1 3/4"	1.1 x 45	S	4252527-01	—	—
green/white	18 x 1 1/4"	1.3 x 32	S	4252560-01	4251687-01	4214323
green/white	18 x 1 1/4"	1.3 x 32	W	4254562-01	4253604-01	4214323
green	18 x 1 3/4"	1.3 x 45	S	4252551-01	4251679-01	4214137
green	18 x 1 3/4"	1.3 x 45	W	4254554-01	4253590-01	4214137
grey	16 x 1 1/4"	1.7 x 32	S	4252586-01	4251709-01	—
grey	16 x 2"	1.7 x 50	S	4252578-01	4251695-01	4214170
grey	16 x 2"	1.7 x 50	W	4254570-01	4253612-01	4214170
orange	14 x 1 1/4"	2.2 x 32	S	4251890-01	—	—
orange	14 x 2"	2.2 x 50	S	4252594-01	4251717-01	4214218
orange	14 x 2"	2.2 x 50	W	4254597-01	4253639-01	4214218

Venofix® Safety – Safety Winged IV Needle



- Safety venipuncture set for short-term injection, infusion and transfusion
- Optimized steel needle ensures an atraumatic puncture
- DEHP-free, kink resistant and highly transparent tubing
- Easy activation of safety mechanism during handling procedure
- Possibility of in-vein activation – no exposure to contaminated needle
- Audible click assures the reliable activation of in-built safety mechanism
- Once locked, the mechanism stays locked

User benefits for safe application

- 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

Color	Size		Tubing length (cm)	Flow rate (ml/min)	Residual volume (ml)	Ref. No.
	G	mm				
grey		0.4 x 14	30	2.1	0.69	4056501-01
orange	25	0.5 x 19	30	5.9	0.69	4056502-01
blue	23	0.65 x 19	30	14.3	0.69	4056503-01
green	21	0.8 x 19	30	32.4	0.69	4056504-01
green	21	0.8 x 19	18	34.8	0.51	4056506-01
yellow	19	1.1 x 19	30	60.2	0.69	4056505-01












Useful length: 19 mm, Luer-Lock fitting with closing cone

Sales unit 500 pcs.

IV Catheter with injection port, catheter made of FEP or PUR



- With four embedded X-ray contrast lines
- Specially shaped catheter tip and needle with backcut bevel for minimal puncture trauma
- Self-closing injection valve
- Flexible fixation wings, sloped supporting surface to compensate the cannula inclination
- Grip design for one-handed puncture technique
- Hydrophobic blood stopper
- Removable closing cone
- Lock fitting
- PVC-free, latex-free


Color	Size		Vasofix®		Stylet
	G	Ø mm	FEP	PUR (Certon®)	
 yellow	24 x 3/4"	0.7 x 19	—	4269071	—
 blue	22 x 1"	0.9 x 25	4268091B	4269098	4215095
  pink/white	20 x 1"	1.1 x 25	—	4269217	4215117
 pink	20 x 1 1/4"	1.1 x 33	4268113B	4269110	4219104
  green/white	18 x 1 1/4"	1.3 x 33	4268334B	4269330	4219139
 green	18 x 1 3/4"	1.3 x 45	4268130B	4269136	4219120
 white	17 x 1 3/4"	1.5 x 45	4268156B	4269152	4215150
 grey	16 x 2"	1.7 x 50	4268172B	4269179	4219171
 orange	14 x 2"	2.2 x 50	4268210B	4269225	4219201

Sales Unit/ pcs.: 200 pcs. (4 x 50 pcs.)

IV Catheter with or without fixation wing, catheter made of FEP or PUR



- With four embedded X-ray contrast lines
- Specially shaped catheter tip and needle with back bevel for minimal puncture trauma
- Grip design for one-handed puncture technique
- Highly transparent blood flash-back chamber
- Hydrophobic blood stopper
- Lock fitting
- PVC-free, latex-free

Color	Size		Straight or Winged	Introcan®		Stylet
	G	Ø mm		FEP	PUR (Certon®)	
 yellow	24 x 3/4"	0.7 x 19	S	4252071B	4251300	—
 yellow	24 x 3/4"	0.7 x 19	W	4254074B	4253302	—
 blue	22 x 1"	0.9 x 25	S	4252098B	4251318	4214099
 blue	22 x 1"	0.9 x 25	W	4254090B	4253310	4214099
 pink	20 x 1 1/4"	1.1 x 32	S	4252110B	4251326	4214110
 pink	20 x 1 1/4"	1.1 x 32	W	4254112B	4253329	4214110
 green/white	18 x 1 1/4"	1.3 x 32	S	4252322B	4251342	4214323
 green/white	18 x 1 1/4"	1.3 x 32	W	4254325B	4253345	4214323
 green	18 x 1 3/4"	1.3 x 45	S	4252136B	4251334	4214137
 green	18 x 1 3/4"	1.3 x 45	W	4254139B	4253337	4214137
 grey	16 x 2"	1.7 x 50	S	4252160B	4251350	4214170
 grey	16 x 2"	1.7 x 50	W	4254171B	4253353	4214170
 orange	14 x 2"	2.2 x 50	S	4252217B	4251369	4214218
 orange	14 x 2"	2.2 x 50	W	4254210B	4253361	4214218



Sales Unit/ pcs.: 200 pcs. (4 x 50 pcs.)

Venofix® A – Venipuncture set



- Venipuncture sets for short-term injection, infusion, transfusion
- Puncture needle made of chrome-nickel steel with micro-siliconized bevel
- Interlocking wings with structured grip surface
- Kink-resistant, flexible and transparent tubing, length 30 cm
- Color-coded
- Luer-Lock fitting
- Closing cone lock
- Extension tubing 300 mm
- **DEHP-free**

Color	Needle Gauge	Needle		Sales Unit/ pcs.	Ref. no.	DEHP-free	Latex-free
		outer ø	length				
ivory	19 G	1.1	10	200	4056310	●	●
green	21 G	0.8	15	200	4056337	●	●
black	22 G	0.7	20	200	4056345	●	●
blue	23 G	0.65	20	200	4056353	●	●
purple	24 G	0.55	20	200	4056361	●	●
orange	25 G	0.5	20	200	4056370	●	●
grey	27 G	0.4	20	200	4056388	●	●

Injekt® - 2-piece single-use syringes 1 – 20 ml



- Made of Polypropylene / Polyethylene
 - PVC-, DEHP-, and Latex-free
 - Silicone oil-free
 - Green plunger for easy recognition of the filling volume
 - Smooth and steady plunger action
 - Safe plunger back-stop for easy aspiration up to the maximum volume
 - Black graduation for ideal contrast and readability
 - High barrel transparency simplifies inspection of the syringe content
 - Extended graduation allows for exact dosage beyond the nominal volume and encourages the use of small-volume syringes for intermediate volumes
- | | |
|----------------|---------------------|
| <i>nominal</i> | <i>usable up to</i> |
| 2 ml | 3 ml |
| 5 ml | 6 ml |
| 10 ml | 12 ml |
| 20 ml | 24 ml |
- Produced according to ISO 7886-1
 - Box of 100 pcs.

Description	Graduation	Cone	Fitting	Encl. Sterican® needle	Sales Unit/pck.	Ref. no.
<i>Injekt®-F - 1 ml fine dosage syringe with "displacement spike" (reduces residual volume)</i>						
Injekt®-F Solo 1 ml	0.01 ml	centric	Luer-Slip		18	9166017V
Injekt®-F Duo 1 ml	0.01 ml	centric	Luer-Slip	G 25 x 5/8"	18	9166033V
Injekt® 1 ml Heparin				G 25 x 5/8"		9166106V
Injekt® 1 ml Heparin						9166254V
<i>Injekt® 2 ml - 20 ml Solo (without needle)</i>						
Injekt® Solo 2 ml	0.1 ml	centric	Luer-Slip		25	4606027V
Injekt® Solo 2 ml	0.1 ml	centric	Luer-Lock		25	4606701V
Injekt® Solo 5 ml	0.2 ml	eccentric	Luer-Slip		20	4606051V
Injekt® Solo 5 ml	0.2 ml	centric	Luer-Lock		20	4606710V
Injekt® Solo 10 ml	0.5 ml	eccentric	Luer-Slip		12	4606108V
Injekt® Solo 10 ml	0.5 ml	centric	Luer-Lock		12	4606728V
Injekt® Solo 20 ml	1.0 ml	centric	Luer-Lock		8	4606736V
Injekt® Solo 20 ml	1.0 ml	eccentric	Luer-Slip		8	4606205V
<i>Injekt® 2 ml - 20 ml Duo (with enclosed needle)</i>						
Injekt® Duo 2 ml	0.1 ml	centric	Luer-Slip	G 23 x 1 1/4"	25	4645022V
Injekt® Duo 5 ml	0.2 ml	eccentric	Luer-Slip	G 22 x 1 1/4"	20	4645057V
Injekt® Duo 10 ml	0.5 ml	eccentric	Luer-Slip	G 21 x 1 1/2"	12	4645103V
Injekt® Duo 20 ml	1.0 ml	eccentric	Luer-Slip	G 21 x 1 1/2"	8	4645200V

Omnifix® - 3-piece single use syringes 1 ml – 100 ml



- Piston with double sealing ring for slow aspiration and injection
- Made of Polypropylene / Polyisoprene
- PVC-, DEHP-, and Latex-free
- Easily noticeable backstop to prevent unintentional withdrawal of plunger from barrel
- Black graduation for ideal contrast and readability
- High barrel transparency simplifies inspection of the syringes content
- Produced according to ISO 7886-1
- Box of 100 pcs.

Description	Graduation	Cone	Fitting	Encl. Sterican® needle	Sales Unit/pck.	Ref. no.
<i>Omnifix®-F - 1 ml fine dosage syringe (e.g. tuberculin, allergy testing)</i>						
Omnifix®-F Solo 1 ml	0.01 ml	centric	Luer-Slip		18	9161406V
Omnifix®-F Duo 1 ml	0.01 ml	centric	Luer-Slip	G 25 x 5/8"	18	9161465V
<i>Omnifix®-H Solo - 1 ml (with heparin graduation)</i>						
Omnifix®-H Solo 1 ml						9162607V
Omnifix®-H Solo 1 ml						9162909V
<i>Omnifix® 2 ml - 30 ml Solo (without needle)</i>						
Omnifix® Solo 2 ml	0.1 ml	centric	Luer-Slip		25	4616022V
Omnifix® Solo 2 ml	0.1 ml	centric	Luer-Lock		25	4617029V
Omnifix® Solo 3 ml	0.1 ml	centric	Luer-Slip		25	4616025V
Omnifix® Solo 3 ml	0.1 ml	centric	Luer-Lock		25	4617022V
Omnifix® Solo 5 ml	0.2 ml	eccentric	Luer-Slip		20	4616057V
Omnifix® Solo 5 ml	0.2 ml	centric	Luer-Lock		20	4617053V
Omnifix® Solo 10 ml	0.5 ml	eccentric	Luer-Slip		12	4616103V
Omnifix® Solo 10 ml	0.5 ml	centric	Luer-Lock		12	4617100V
Omnifix® Solo 20 ml	1.0 ml	eccentric	Luer-Slip		8	4616200V
Omnifix® Solo 20 ml	1.0 ml	centric	Luer-Lock		8	4617207V
Omnifix® Solo 30 ml	1.0 ml	eccentric	Luer-Slip		6	4616308F
Omnifix® Solo 30 ml	1.0 ml	centric	Luer-Lock		6	4617304F

Omnifix® – 3-piece single use syringes 2 ml – 100 ml

Article	Graduation	Cone	Fitting	Encl. Sterican® needle	Sales Unit/ pck.	Ref. no.
<i>Omnifix® 2 ml – 20 ml Duo (with enclosed needle)</i>						
Omnifix® Duo 2 ml	0.1 ml	centric	Luer-Slip	G 23 x 1 1/4"	25	4643100V
Omnifix® Duo 3 ml	0.1 ml	centric	Luer-Slip	G 23 x 1 1/4"	25	4643102V
Omnifix® Duo 5 ml	0.2 ml	eccentric	Luer-Slip	G 22 x 1 1/4"	20	4643119V
Omnifix® Duo 10 ml	0.5 ml	eccentric	Luer-Slip	G 21 x 1 1/2"	12	4643127V
Omnifix® Duo 20 ml	1.0 ml	eccentric	Luer-Slip	G 21 x 1 1/2"	8	4643135V
<i>Omnifix® 50 ml</i>						
Omnifix® (60ml) Solo	1.0 ml	eccentric	Luer-Slip		1	4616502F
Omnifix® (60ml) Solo	1.0 ml	centric	Luer-Lock		1	4617509F
Omnifix® (60ml) Solo	1.0 ml	centric	Catheter fitting		1	4613503F
<i>Omnifix® 50 ml – with aspiration grip and luer adapter</i>						
Omnifix® (60 ml) Solo	1.0 ml	centric	Catheter fitting		1	4613554F
<i>Omnifix® 100 ml – with aspiration grip and luer adapter</i>						
Omnifix® Solo	2.0 ml	centric	Catheter fitting		1	4614003F

Extended graduation allows for exact dosage beyond the nominal volume and encourages the use of small-volume syringes for intermediate volumes:

nominal	usable up to
2 ml	2.5 ml
10 ml	12 ml
50 ml	60 ml

Sterican® – Single use hypodermic needles


- Thin-walled needles made of stainless, chromium-nickel steel and extremely smooth surface
- 3-facet – long and short bevel
- Transparent Luer-Lock plastic hub made of Polypropylene, colour-coded
- Colour-coded dispenser box for quick identification by size
- Dispenser boxes containing 100 needles

Indication	Color code	Pravaz	Short bevel	G / inch	mm	Ref. no.
Intramuscular, subcutaneous, intravenous and intra-arterial	yellow	1		G 20 x 1 1/2"	0.90 x 40	4657519
	green	2		G 21 x 1 1/2"	0.80 x 40	4657527
	black	12		G 22 x 1 1/4"	0.70 x 30	4657624
	blue	14		G 23 x 1 1/4"	0.60 x 30	4657640
	blue	16		G 23 x 1"	0.60 x 25	4657667
	purple	17		G 24 x 1"	0.55 x 25	4657675
	brown	18		G 26 x 1"	0.45 x 25	4657683
	grey	20		G 27 x 3/4"	0.40 x 20	4657705
Phlebotomy, blood sampling	pink		●	G 18 x 1 1/2"	1.20 x 40	4665120
	ivory		●	G 19 x 1 1/2"	1.10 x 40	4665112
Intramuscular	pink		●	G 18 x 2"	1.20 x 50	4667123
	ivory			G 19 x 2"	1.10 x 50	4665511
	yellow		●	G 20 x 2"	0.90 x 50	4667093
	green			G 21 x 2"	0.80 x 50	4665503
Deep intramuscular	yellow			G 20 x 2 3/4"	0.90 x 70	4665791
	green			G 21 x 3 1/8"	0.80 x 80	4665465
Neural therapy	green			G 21 x 4 3/4"	0.80 x 120	4665643
	blue			G 23 x 2 3/8"	0.60 x 60	4665600
	blue			G 23 x 3 1/8"	0.60 x 80	4665635
Insulin	brown			G 26 x 1/2"	0.45 x 12	4665457
	grey			G 27 x 1/2"	0.40 x 12	4665406
	yellow			G 30 x 1/2"	0.30 x 12	4656300
Heparin, tuberculin	orange			G 25 x 5/8"	0.50 x 16	4657853
Blood sampling	ivory			G 19 x 1 1/2"	1.10 x 40	4657799
	ivory			G 19 x 1 1/4"	1.10 x 30	4665317
	yellow			G 20 x 1"	0.90 x 25	4657500
	green			G 21 x 1"	0.80 x 25	4657543
	black			G 22 x 1 1/2"	0.70 x 40	4660021

Sterican® – Single use hypodermic special needles

Indication	Color code	Short bevel	G / inch	mm	Ref. no.
Miscellaneous indications	black		G 22 x 2"	0.70 x 50	4650018
	pink		G 18 x 1 1/2"	1.20 x 40	4650034
	light green	●	G 14 x 3 1/8"	2.10 x 80	4665473

Sterican® blunt – Single use hypodermic needles, without bevel

Indication	Color code	G / inch	mm	Ref. no.
For draw up and irrigation	green	G 21 x 7/8"	0.80 x 22	9180109
	grey	G 27 x 1"	0.40 x 25	9180117

Sterican® – Single use hypodermic needles, dental

Indication	Color code	G / inch	mm	Ref. no.
Upper and lower jaw, conduction anesthesia Infiltration anesthesia, jaw incisors, upper and lower jaw Nerve block anesthesia	orange	G 25 x 1"	0.50 x 25	9186158
	orange	G 25 x 1 1/2"	0.50 x 40	9186166
	grey	G 27 x 1"	0.40 x 25	9186174
	grey	G 27 x 1 1/2"	0.40 x 40	9186182

Sterican® Mix – Blunt needles (for drug admixture)



- 40° and 90° blunt needles
- Thin-walled cannula for faster draw-up
- Minimizes the risk of needle-stick injuries
- Made of stainless, chromium-nickel steel
- Made of Polypropylene (needle hub)
- Red coloured hub and protective cap for clear differentiation (40°)
- Box of 100 pcs.



Color code	G / inch	Needle bevel	Ø x mm	Ref. no.
red	G 18 x 1 1/2"	semi blunt (40°)	1.20 x 40	4550400-01
pink	G 18 x 1 1/2"	blunt (90°)	1.20 x 40	4038088-01

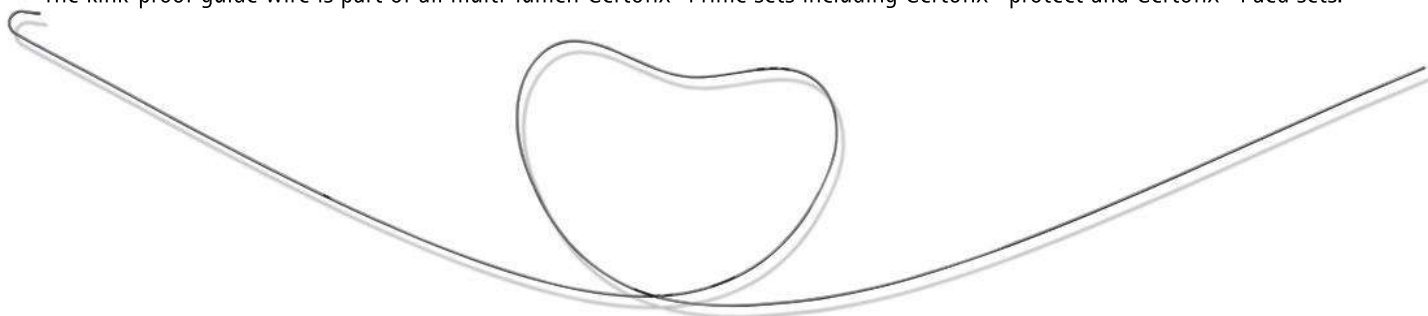
Kink-Proof Guide Wire and Valve Needle – The ultimate tools for safe catheter placement

The new kink-proof guide wire from B. Braun makes placement of central venous catheter safe and easy even when confronted with difficult anatomical situation. The material of the guide wire flexibly adapts to the course of the vein but remains firm enough for easy advancement. When encountering anatomical obstacles the kink-proof guide wire does not bend or kink but resumes its straightness immediately after passing the barrier.

The kink-proof guide wire makes catheter insertion smooth by

- Its kink-proof flexibility
- Optimized tensile strength and
- Ideal ratio of flexibility and resilience

The kink-proof guide wire is part of all multi-lumen Certofix® Prime sets including Certofix® protect and Certofix® Paed sets.



B. Braun offers in all V-sets a unique introducer needle with a second hub. This allows the user to introduce the guide wire through the second hub without the need for removing the syringe from the introducer needle before. The medical doctor saves time after vein puncture and has a low risk of wrong manipulation and missing the vein.

The V-sets of B. Braun offer an unique combination of safety components which fits into each like a puzzle:



- Safe cannulation of the vein with the valve needle
- Quick, blood-free introduction of the guide wire via the second hub
- Smooth advancement of the kink-proof guide wire thanks to extreme flexibility but adequate stiffness
- Atraumatic soft tip and perfectly manufactured catheter surface reduce risk of endothelial damage
- A Safsite® valve on each lumen prevents the life-threatening risk of air embolism due to unintended loosening of the infusion lines.

B. Braun Certofix®: more certainty, more safety, more success

Certifix® protect – Antipathogenic central venous catheter for long-term protection against catheter infection

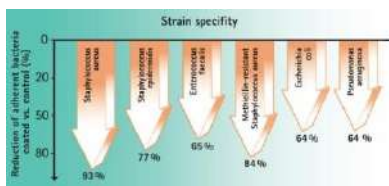


Certifix® Trio protect

The newly developed Certifix® protect catheter from B. Braun brings together all the essential features to reduce the rate of complication in critically ill patients.

- Polyurethane catheter with surfaces chemically modified to repel bacteria efficiently
- Active agents are irreversibly bonded and fixed to the catheter surface – no leaching could occur even during long-term use
- Chemical groups are well-known and highly tolerated by humans to avoid any adverse reactions like allergic sensitization reactions.
- Antiseptic groups made of polyhexanide and hydrophilic groups give the Certifix® protect a unique combination of antibacterial and anti-thrombogenic effect
- First and only catheter with antibacterial lumen protection up to the hub ideally suited for long-term treated patients in the ICU

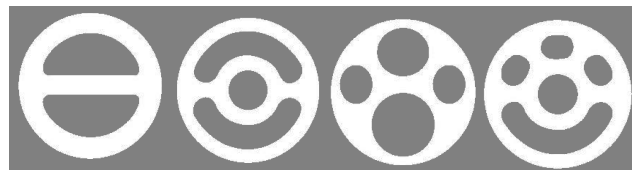
Product description:



Efficiency of Certifix® protect against various bacterial strains.

- Multi-lumen polyurethane catheter with chemically modified lumen from soft tip to hub and modified external surface from soft tip to junction hub
- Antibacterial surface modification to prevent adhesion and growth of gram-positive and gram-negative bacteria
- Efficient against most important pathogens: MRSA, Staphylococcus aureus, Staphylococcus epidermidis, Enterococcus faecalis, Escherichia coli, Pseudomonas aeruginosa
- Anti-thrombogenic surface modification without heparine to reduce risk of thrombus aggregation
- Surface modification is bonded to catheter material for almost indefinite mode of action
- 2, 3, 4 and 5-lumen catheter sets
- 2 and 3-lumen HighFlow catheter sets
- Kink-proof guide wire and valve needle as introducer needle
- Green clamp on extension line for quick identification

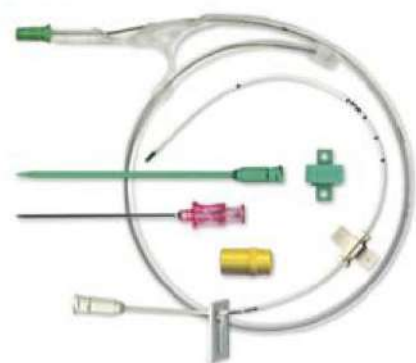
Certofix® protect – Multi-lumen catheter for prevention of catheter colonization



Product	Code	Needle	Guide wire	Catheter			Sales Unit/ pcs.	Ref. no.
		Size, Length, mm/inch		F	Length cm/inch	Channels G		
Certofix® protect Duo	V715	G18, 70 / 2 7/9"	0.89 x 50 (kink-proof)	7	15/6"	16/16	10	4166159P
Certofix® protect Duo	V720	G18, 70 / 2 7/9"	0.89 x 50 (kink-proof)	7	20/8"	16/16	10	4161211P
Certofix® protect Duo	V730	G18, 70 / 2 7/9"	0.89 x 50 (kink-proof)	7	30/12 "	16/16	10	4161319P
Certofix® protect Duo HF	V720	G18, 70 / 2 7/9"	0.89 x 50 (kink-proof)	7	20/8"	14/18	10	4168534P
Certofix® protect Trio	V715	G18, 70 / 2 7/9"	0.89 x 50 (kink-proof)	7	15/6"	16/16/18	10	4162153P
Certofix® protect Trio	V720	G18, 70 / 2 7/9"	0.89 x 50 (kink-proof)	7	20/8"	16/16/18	10	4163214P
Certofix® protect Trio	V730	G18, 70 / 2 7/9"	0.89 x 50 (kink-proof)	7	30/12 "	16/16/18	10	4163311P
Certofix® protect Trio HF	V1220	G18, 70 / 2 7/9"	0.89 x 50 (kink-proof)	12	20/8"	16/12/12	10	4160622P
Certofix® protect Quattro	V815	G18, 70 / 2 7/9"	0.89 x 50 (kink-proof)	8	15/6"	16/18/18/12	10	4167767P
Certofix® protect Quattro	V820	G18, 70 / 2 7/9"	0.89 x 50 (kink-proof)	8	20/8"	16/18/18/12	10	4167775P
Certofix® protect Quattro	V830	G18, 70 / 2 7/9"	0.89 x 50 (kink-proof)	8	30/12 "	16/18/18/12	10	4167783P
Certofix® protect Quinto	V1220	G18, 70 / 2 7/9"	0.89 x 50 (kink-proof)	12	20/8 "	16/18/18/18/12	10	4166868P

Introducer needle: V = Valve needle

Certofix® Mono – Single lumen Seldinger sets with selected components



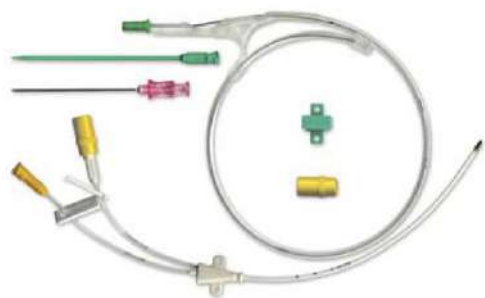
- Catheter made of highly biocompatible polyurethane
- Soft tip to reduce venous trauma
- Safety bag with Seldinger introducer needle, latex-free closing cone, dilator
- Opaque, X-ray detectable catheter with length marking
- Moveable fixation wing
- Transparent extension line with side clamp for short-term interruption
- Nitinol guide wire with one J-tip and one straight tip
- Ergonomic dispenser for easy guide wire advancement



Code	Needle		Kink-proof Guide wire ø x length mm x cm	Catheter			Sales Unit/ pcs.	Ref. no.
	G	Length mm/inch		Size	ø mm	Length cm/inch		
Single lumen polyurethane catheter with soft tip, slide clamp, moveable fixation wing, guide wire with J-tip, dilator , Seldinger introducer needle, closing cone								
Mono 215	S, 20	50/2"	0.63 x 50	4F/18G	1.4	15/6"	10	4160185E
Mono 220	S, 20	50/2"	0.63 x 50	4F/18G	1.4	20/8"	10	4160207E
Mono 315	S, 18	70/2 7/9"	0.89 x 50	5F/16G	1.7	15/6"	10	4160223E
Mono 320	S, 18	70/2 7/9"	0.89 x 50	5F/16G	1.7	20/8"	10	4160258E
Mono 330	S, 18	70/2 7/9"	0.89 x 70	5F/16G	1.7	30/12"	10	4160282E
Mono 415	S, 18	70/2 7/9"	0.89 x 50	6F/14G	2.1	15/6"	10	4160509E
Mono 420	S, 18	70/2 7/9"	0.89 x 50	6F/14G	2.1	20/8"	10	4160304E
Mono 430	S, 18	70/2 7/9"	0.89 x 70	6F/14G	2.1	30/12"	10	4160762E

Introducer needle, S = Seldinger needle

Certofix® Duo/Trio – Multi-lumen Seldinger sets with selected components



- Catheter made of highly biocompatible polyurethane
- Soft tip to reduce venous trauma
- Safety bag with Seldinger introducer needle, closing cones & dilator
- Opaque, X-ray detectable catheter with length marking
- Moveable fixation wing
- Latex-free closing cone for each lumen
- Transparent extension line with side clamp for short-term interruption
- Nitinol guide wire with one J-tip and one straight tip
- Ergonomic dispenser for easy guide wire advancement



Code	Needle		Kink-proof Guide wire ø x length mm x cm	Catheter			Sales Unit/ pcs.	Ref. no.
	G	Length mm/inch		Size	ø mm	Length cm/inch		
Double lumen polyurethane catheter with soft tip, slide clamps, moveable fixation wing, guide wire with J-tip, dilator , 2 closing cones, Seldinger introducer needle								
Duo 715	S, 18	70/2 7/9"	0.89 x 50	7F	2.4	15/6"	10	4164156E
Duo 720	S, 18	70/2 7/9"	0.89 x 50	7F	2.4	20/8"	10	4162200E
Duo 730	S, 18	70/2 7/9"	0.89 x 70	7F	2.4	30/12"	10	4162307E
Triple lumen polyurethane catheter with soft tip, slide clamps, moveable fixation wing, guide wire with J-tip, dilator , 3 closing cones, Seldinger introducer needle								
Trio 715	S, 18	70/2 7/9"	0.89 x 50	7F	2.4	15/6"	10	4161157E
Trio 720	S, 18	70/2 7/9"	0.89 x 50	7F	2.4	20/8"	10	4163206E
Trio 730	S, 18	70/2 7/9"	0.89 x 70	7F	2.4	30/12"	10	4163303E

Introducer needle, S = Seldinger needle

Certofix® Mono – Comprehensive single lumen catheter sets (Seldinger method)



- Catheter made of highly biocompatible polyurethane
 - Opaque, X-ray detectable catheter with length marking
 - Transparent extension line with side clamp
- Soft tip to reduce venous trauma
- Ready-to-use set components provided inside safety bag: Dilator, Safsite® valve, ECG connection cable, 5 ml Omnifix® lock syringe (included in all V-sets)
- Integrated and moveable fixation wing (for all sets with catheter length > 15 cm, except of Mono S 215 and Mono V 215)
- Highly flexible steel guide wire with one J-tip and one straight tip
- Different introducer needles: S = Seldinger needle; V = Valve needle



Code	Needle			Guide wire ø x length mm x cm	Catheter			Sales Unit/ pcs.	Ref. no.
	Type	G	length mm/inch		Size	ø mm	length cm/inch		
Vena jugularis									
S 215	S	20	50/ 2"	0.63 x 50	4F/18G	1.4	15/6"	10	4160185
V 215	V	20	50/ 2"	0.63 x 50	4F/18G	1.4	15/6"	10	4160193
S 315	S	18	70/2 7/8"	0.89 x 50	5F/16G	1.7	15/6"	10	4160223
V 315	V	18	70/2 7/8"	0.89 x 50	5F/16G	1.7	15/6"	10	4160231
S 320	S	18	70/2 7/8"	0.89 x 50	5F/16G	1.7	20/8"	10	4160258
V 320	V	18	70/2 7/8"	0.89 x 50	5F/16G	1.7	20/8"	10	4160266
S 415	S	18	70/2 7/8"	0.89 x 50	6F/14G	2.1	15/6"	10	4160509
V 415	V	18	70/2 7/8"	0.89 x 50	6F/14G	2.1	15/6"	10	4160517
S 420	S	18	70/2 7/8"	0.89 x 50	6F/14G	2.1	20/8"	10	4160304
V 420	V	18	70/2 7/8"	0.89 x 50	6F/14G	2.1	20/8"	10	4160320
Vena subclavia									
S 220	S	20	50/ 2"	0.63 x 50	4F/18G	1.4	20/8"	10	4160207
V 220	V	20	50/ 2"	0.63 x 50	4F/18G	1.4	20/8"	10	4160215
S 330	S	18	70/2 7/8"	0.89 x 70	5F/16G	1.7	30/12"	10	4160282
V 330	V	18	70/2 7/8"	0.89 x 70	5F/16G	1.7	30/12"	10	4160290
S 430	S	18	70/2 7/8"	0.89 x 70	6F/14G	2.1	30/12"	10	4160762
V 430	V	18	70/2 7/8"	0.89 x 70	6F/14G	2.1	30/12"	10	4160789

Certofix® Duo/Trio – Comprehensive multi-lumen catheter sets



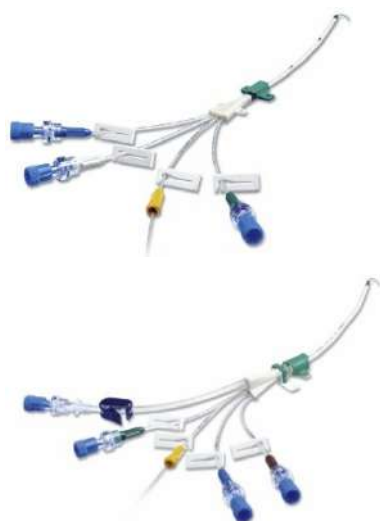
Certofix® Duo – Double lumen catheter

- Kink-proof guide wire with unsurpassed flexibility with J-tip and one straight tip
- Catheter made of highly biocompatible polyurethane
 - Opaque, X-ray detectable catheter with length marking
 - Transparent extension line with side clamp
- Ready-to-use set components provided inside safety bag:
 - Dilator, Safsite® valves for each hub, ECG connection cable, scalpel E11 type, 5 ml Omnifix® lock syringe (included in all V-sets)
- Soft tip to reduce venous trauma
- Integrated and moveable fixation wing
- Different introducer needles:
 - S = Seldinger needle; V = Valve needle

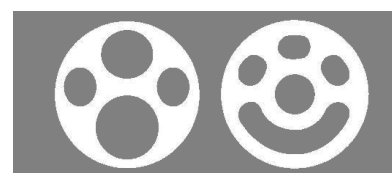


Code	Needle		Guide wire ø x length mm x cm	Catheter				Sales Unit/ pcs.	Ref. no.
	ø Type	Length mm/inch		Size	Outer ø mm	Length cm/inch	Channels G		
Certofix® Duo – Double lumen catheter									
S 715	18G S	70/2 7/9"	0.89 x 50 (kink-proof)	7 F	2.4	15/6"	16/16	10	4164158
V 715	18G V	70/2 7/9"	0.89 x 50 (kink-proof)	7 F	2.4	15/6"	16/16	10	4166159
S720	18G S	70/2 7/9"	0.89 x 50 (kink-proof)	7 F	2.4	20/8"	16/16	10	4167385
V 720	18G V	70/2 7/9"	0.89 x 50 (kink-proof)	7 F	2.4	20/8"	16/16	10	4161211
S 730	18G S	70/2 7/9"	0.89 x 70 (kink-proof)	7 F	2.4	30/12"	16/16	10	4167394
V 730	18G V	70/2 7/9"	0.89 x 70 (kink-proof)	7 F	2.4	30/12"	16/16	10	4161319
Certofix® Trio – Triple lumen catheter									
S 715	18G S	70/2 7/9"	0.89 x 50 (kink-proof)	7 F	2.4	15/6"	16/18/18	10	4161159
V 715	18G V	70/2 7/9"	0.89 x 50 (kink-proof)	7 F	2.4	15/6"	16/18/18	10	4162153
S720	18G S	70/2 7/9"	0.89 x 50 (kink-proof)	7 F	2.4	20/8"	16/18/18	10	4167408
V 720	18G V	70/2 7/9"	0.89 x 50 (kink-proof)	7 F	2.4	20/8"	16/18/18	10	4163214
S 730	18G S	70/2 7/9"	0.89 x 70 (kink-proof)	7 F	2.4	30/12"	16/18/18	10	4163306
V 730	18G V	70/2 7/9"	0.89 x 70 (kink-proof)	7 F	2.4	30/12"	16/18/18	10	4163311

Certofix® Quattro/Quinto – Comprehensive multi-lumen catheter sets (Seldinger method)



- Kink-proof guide wire with unsurpassed flexibility with J-tip and one straight tip
- Catheter made of highly biocompatible polyurethane
 - Opaque, X-ray detectable catheter with length marking
 - Transparent extension line with side clamp
- Soft tip to reduce venous trauma
- Ready to use set components provided inside safety bag: Dilator, Safsite® valve for each hub, ECG connection cable, scalpel E11 type, 5 ml Omnifix® lock syringe (included in all V-sets)
- Integrated and moveable fixation wing
- Different introducer needles: S = Seldinger needle; V = Valve needle



Code	Needle		Guide wire ø x length mm x cm	Catheter				Sales Unit/ pcs.	Ref. no.
	ø Type	Length mm/inch		Size	Outer ø mm	Length cm/inch	Channels G		
Certofix® Quattro – Four lumen catheter									
V 815	18G V	70/2 7/9"	0.89 x 50 (kink-proof)	8F	2.8	15/6"	16/18/18/14	10	4167767
V 820	18G V	70/2 7/9"	0.89 x 50 (kink-proof)	8F	2.8	20/8"	16/18/18/14	10	4167775
V 830	18G V	70/2 7/9"	0.89 x 50 (kink-proof)	8F	2.8	30/12"	16/18/18/14	10	4167783
Certofix® Quinto – Five lumen catheter									
V 1215	18G V	70/2 7/9"	0.89 x 50 (kink-proof)	12F	4.0	15/6"	16/18/18/18/12	10	4166841
S 1220	18G S	70/2 7/9"	0.89 x 70 (kink-proof)	12F	4.0	20/8"	16/18/18/18/12	10	4166852
V 1220	18G V	70/2 7/9"	0.89 x 70 (kink-proof)	12F	4.0	20/8"	16/18/18/18/12	10	4166868

Introducer needle: V = Valve needle S = Seldinger needle

Certofix® Duo HF/Trio HF – High flow (HF) catheter for High Flow Infusion



Code	Needle			Guide wire ø x length mm x cm	Catheter				Sales Unit/ pcs.	Ref. no.
	Type	G	length mm/inch		F	Outer ø mm	length cm/inch	Channels G		
Double lumen polyurethane catheter with 2 large bore channels , soft tip, kink-proof guide wire with J-tip, 2 Safsite® valves, dilator, Omnifix® 5 ml lock syringe, movable fixation clip, ECG cable, introducer										
S 715	S	18	70/2 7/9"	0.89 x 50 (kink-proof)	7	2.4	15/6"	14/18	10	4168502
V 715	V	18	70/2 7/9"	0.89 x 50 (kink-proof)	7	2.4	15/6"	14/18	10	4168518
S 720	S	18	70/2 7/9"	0.89 x 50 (kink-proof)	7	2.4	20/8"	14/18	10	4168528
V 720	V	18	70/2 7/9"	0.89 x 50 (kink-proof)	7	2.4	20/8"	14/18	10	4168534
V 920	V	18	70/2 7/9"	0.89 x 50 (kink-proof)	9	3.0	20/8"	13/13	10	4167511
V 1215	V	18	70/2 7/9"	0.89 x 50 (kink-proof)	12	4.0	15/6"	11/11	10	4167538
V 1220	V	18	70/2 7/9"	0.89 x 50 (kink-proof)	12	4.0	20/8"	11/11	10	4167546
Triple lumen polyurethane catheter with 2 large bore channels 12 G and one channel 16 G, soft tip, kink-proof guide wire with J-tip, 3 Safsite® valves, dilator, Omnifix® 5 ml lock syringe, movable fixation clip, ECG cable, introducer										
S 1215	S	18	70/2 7/9"	0.89 x 50 (kink-proof)	12	4.0	15/6"	16/12/12	10	4160578
V 1215	V	18	70/2 7/9"	0.89 x 50 (kink-proof)	12	4.0	15/6"	16/12/12	10	4160614
S 1220	S	18	70/2 7/9"	0.89 x 50 (kink-proof)	12	4.0	20/8"	16/12/12	10	4160586
V 1220	V	18	70/2 7/9"	0.89 x 50 (kink-proof)	12	4.0	20/8"	16/12/12	10	4160622

Introducer needle: V = Valve needle S = Seldinger needle

Certofix® Mono Paed – Single lumen central venous catheter for pediatrics
and neonatology (Seldinger method)



Certofix® Mono Paed

- Catheter made of PUR with soft catheter tip
 - opaque, X-ray detectable, with length markings
 - secure fixation with transparent wing fitting
- Kink-proof guide wire with unsurpassed flexibility with J-tip and one straight tip
- S = Seldinger needle G21 (0.8 x 38 mm)
- Infusion extension line, 23 cm, lock
- Blade scalpel fig. E 11 and ECG connection cable
- Discofix® 3-way stopcock



Code	Needle			Kink-proof guide wire	Catheter			Sales Unit/ pcs.	Ref. no.
	Type	G	length (mm/inch)		G	Outer ø (mm)	length cm/Inch		
S 110	S	21	38/ 1 ½"	0.46 x 250	22	0.9	10/5"	10	4160177

Certofix® Duo/Trio Paed – Multi-lumen central venous catheter for pediatrics (Seldinger method)



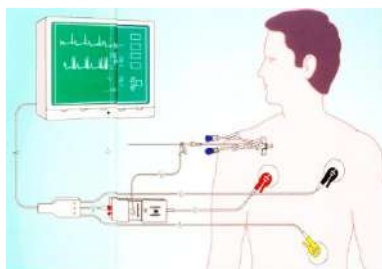
Certofix® Duo Paed with Teddy Bear fixation and Certofix® Trio Paed (here Teddy Bear fixation not shown)

- Catheter made of PUR with soft catheter tip
 - opaque, X-ray detectable, with length markings
 - color-coded fittings with Safsite® valves
- Soft, self-adhesive catheter fixation plaster in form of Teddy Bear for stitch free catheter fixation
- Kink-proof guide wire with unsurpassed flexibility with flexible J-tip and straight tip
- S = Seldinger needle G21 (0.8 x 38 mm)
- Omnifix® lock syringe, 5 ml
- Dilator, Blade scalpel fig. E11, ECG connection cable
- Movable fixation clip
- Safsite® valve to avoid air embolism



Code	Needle			Kink-proof guide wire ø x length mm x cm	Catheter				Sales Unit/ pcs.	Ref. no.
	Type	G	length mm/inch		F / G	Outer ø (mm)	length cm/inch	Channels G		
Certofix® Duo Paed – double lumen catheter										
S 408	S	21	38/ 1 ½"	0.46 x 50	4/18	1.2	8/3 1/5"	22/22	10	4166906
S 413	S	21	38/ 1 ½"	0.46 x 50	4/18	1.2	13/5 1/5"	22/22	10	4166922
S 420	S	21	38/ 1 ½"	0.46 x 50	4/18	1.2	20 /8"	22/22	10	4166949
S 508	S	21	38/ 1 ½"	0.46 x 50	5/16	1.7	8/3 1/5"	18/20	10	4167112
S 513	S	21	38/ 1 ½"	0.46 x 50	5/16	1.7	13/5 1/5"	18/20	10	4167139
S 520	S	21	38/ 1 ½"	0.46 x 50	5/16	1.7	20/8"	18/20	10	4167155
Certofix® Trio Paed – triple lumen catheter										
S 508	S	21	38/ 1 ½"	0.46 x 50	5/16	1.7	8/3 1/5"	20/22/22	10	4167228
S 513	S	21	38/ 1 ½"	0.46 x 50	5/16	1.7	13/5 1/5"	20/22/22	10	4167244
S 520	S	21	38/ 1 ½"	0.46 x 50	5/16	1.7	20/8"	20/22/22	10	4167260

Controlling central venous catheter placement with intra-atrial ECG



- ➔ enables immediate corrective measures to be made in the case of initial incorrect positioning of the catheter
- ➔ helps to prevent subsequent complications, particularly the risk of pericardiac perforation and catheter-induced cardiac arrhythmias
- ➔ replaces the X-ray, thus reduces the time needed and costs involved

See CVC-partner No. 2 brochure (ref. no. 6042589) for more details.

Certodyn® Universal Adapter



- Rapid connection to any kind of ECG monitor
- May be switched from extracorporeal to intra-atrial ECG
- No x-ray required, no radiation exposure
- Effortless identification of the P wave, clear verification of position
- No subsequent re-catheterization due to incorrect positioning
- Medicolegal aspects: ECG position monitoring provides an equivalent level of documentation through accompanying ECG print-out as would be normally available by X-ray position monitoring.

Alphacard® – CVC placement verification without x-ray

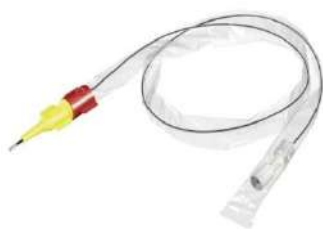


ECG control of catheter positioning with B. Braun Alphacard®

- Is quick and easy to handle
- Gives reliable signals
- Avoids hazardous x-ray's and
- Can be used during and after (!) placement of the central venous (Operating Theatre and ICU)
- Simple connection of syringe to distal hub of CVC and of electrode cable to Certodyn® Universal adapter

Article	Description	Ref. no.
Certodyn®	Universal adapter	4150228
Certodyn®	Universal adapter Paed	4150724
Alphacard®	Syringe with electrode cable to universal adapter for measurement of intra-atrial ECG	U1800401

Cavafix® – Single lumen „Catheter-through-cannula“ central venous catheter



Cavafix® Certo® Mono

- Cavafix® MT
 - made of polyethylene
 - easy placement due to semi-rigid catheter material
 - protective sheath for „No-touch“-technique
- Cavafix® Certo® Mono
 - made of polyurethane (Certon®)
 - transparent, three embedded X-ray contrast lines and catheter markings
 - catheter length embossed on fitting
 - protective catheter sheath
- Catheter brake and lock fitting
- With Braunüle® MT introducer cannula
- Stabilizing stylet for easier manipulation



Article	Code	Braunüle®		Catheter			Sales Unit/ pcs.	Ref. no.
		G	length (mm/inch)	G	inner x outer ø (mm)	length (cm/inch)		
Vena jugularis								
Cavafix® MT	134	18	40/ 1 3/5"	20	0.5 x 0.9	32/13"	50	4286340
Vena jugularis								
Cavafix® Certo® Mono	255	16	50/2"	18	0.8 x 1.4	45/18"	50	4152557
Cavafix® Certo® Mono	335	14	50/2"	16	1.1 x 1.7	32/13"	50	4153359
Cavafix® Certo® Mono	355	14	50/2"	16	1.1 x 1.7	45/18"	50	4153553
Cavafix® Certo® Mono	455	12	50/2"	14	1.4 x 2.1	45/18"	50	4154550
Vena subclavia								
Cavafix® Certo® Mono	257	16	70/2 7/9"	18	0.8 x 1.4	45/18"	50	4152573
Cavafix® Certo® Mono	338	14	80/3 1/5"	16	1.1 x 1.7	32/13"	50	4153383
Cavafix® Certo® Mono	358	14	80/3 1/5"	16	1.1 x 1.7	45/18"	50	4153588
Cavafix® Certo® Mono	458	12	80/3 1/5"	14	1.4 x 2.1	45/18"	50	4154584
Vena basilica								
Cavafix® Certo® Mono	275	16	50/2"	18	0.8 x 1.4	70/28"	50	4152751
Cavafix® Certo® Mono	375	14	50/2"	16	1.1 x 1.7	70/28"	50	4153758
Cavafix® Certo® Mono	475	12	50/2"	14	1.4 x 2.1	70/28"	50	4154754

Cavafix® Duo – Double lumen „Catheter-through-cannula“ central venous catheter



Cavafix® Duo with guide wire and Splittocan® Introducer

- Catheter made of polyurethane (Certon®)
 - soft catheter tip, X-ray detectable, opaque
 - with 2 Safsite® valves
 - color-coded lock fittings
 - catheter brake
 - protective catheter sheath
 - fixation clip
- Splittocan® introducer cannula
 - splittable Braunüle® can be removed following insertion of the catheter
- Guide wire with J-tip for signal conduction
- ECG connection cable
- Sterile blade, fig. E11



Article	Code	Splittocan®		Catheter				Sales Unit/ pcs.	Ref. no.
		G	length (mm/inch)	F	Outer ø (mm)	length (cm/inch)	Channels G		
Polyurethane central venous catheter with two separate lumen, soft tip, one Safsite® valve, fixation clip, ECG cable, Splittocan® introducer needle									
Vena subclavia									
Cavafix® Duo	458	12	80/3 1/5"	6	2.1	45/18"	16/18	10	4151828
Vena basilica									
Cavafix® Duo	475	12	50/2"	6	2.1	70/28"	16/18	10	4151836

Cavafix® Splittocan® – Single lumen „Catheter-through-cannula“ central venous catheter with splittable introducer needle



- Cavafix® Certo® Mono made of polyurethane
- Splittable introducer needle: Splittocan® G14
- 5 different lengths for access via jugular, subclavian and basilic vein
- Fixation plate for catheter fixation increases patient comfort during long-term treatment



Article	Code	Splittocan®		Catheter			Sales Unit/ pcs.	Ref. no.
		G	length (mm/inch)	G	ø (mm)	length (cm)		
Single lumen polyurethane central venous catheter, splittable introducer cannula 14G, fixation plate								
Vena jugularis								
Cavafix® Splittocan®	335	14	50/2"	16	1.1 x 1.7	32	50	4173350
Cavafix® Splittocan®	355	14	50/2"	16	1.1 x 1.7	45	50	4173554
Vena subclavia								
Cavafix® Splittocan®	338	14	80/3 1/5"	16	1.1 x 1.7	32	50	4173384
Cavafix® Splittocan®	358	14	80/3 1/5"	16	1.1 x 1.7	45	50	4173589
Vena basilica								
Cavafix® Splittocan®	375	14	50/2"	16	1.1 x 1.7	70	50	4173759

Cavafix® Certodyn® – Single lumen „Catheter-through-cannula” central venous catheter with guide wire for intra-atrial ECG lead



Cavafix® Certodyn®

- Cavafix® Certo® Mono catheter
- Braunüle® introducer cannula
- Guide wire with J-tip for easy manipulation and signal transduction
- ECG lead cable



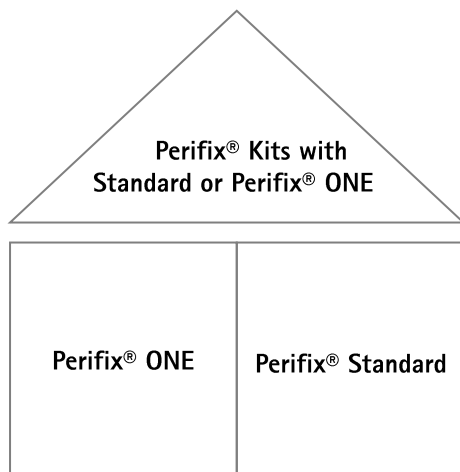
Article	Code	Braunüle®		Catheter			Sales Unit/ pcs.	Ref. no.
		G	length (mm/inch)	G	ø (mm)	length cm		
Single lumen polyurethane central venous catheter, metal guide wire with J-Tip, Braunüle® introducer cannula, ECG lead cable								
Vena jugularis								
Cavafix® Certodyn®	355	14	50/2"	16	1.1 x 1.7	45	50	4180550
Vena basilica								
Cavafix® Certodyn®	375	14	50/2"	16	1.1 x 1.7	70	50	4180755

Gauge/ French or Charriere Conversion

Gauge	Tolerance range for outer ø	French = Charriere 1 French = 1 Charriere = 0,33 mm	Outer ø
24	0.650 mm – 0.749 mm	2	0.67 mm
23			
22	0.750 mm – 0.949 mm		
21			
20	0.950 mm – 1.149 mm	3	1.00 mm
19			
18	1.150 mm – 1.349 mm		
17	1.350 mm – 1.549 mm	4	1.33 mm
16	1.550 mm – 1.849 mm	5	1.67 mm
15			
14	1.850 mm – 2.249 mm	6	2.00 mm
13	2.250 mm – 2.549 mm	7	2.33 mm

			Page
Epidural Anesthesia	Perifix® ONE Catheter	Comfort and capability at your finger tips	64
	Perifix® ONE Sets	Superiour flexibility for more safety to your patients	65
	Perifix® ONE Paed	Highest quality for small patients	66
	Perifix® Standard	Proven quality sets	67
	ProSet	The intelligent concept for optimizing your processes	68
	Perifix® Components	Components for epidural anesthesia	69
	Perifix® Catheter Fixation	Easy way of fixation	70
Spinal Anesthesia	Spinal Anesthesia Kits	Trays for spinal anesthesia	71
	Pencan® / Spinocan® with New Hub	Feel the Difference	72
	Spinocan® / Pencan® / Atraucan®	Needles for spinal anesthesia, diagnostic lumbar puncture and cytologic biopsy	73
Combined Spinal/Epidural Anesthesia	Espocan®	Fast spinal access by previous epidural puncture	75
Peripheral Nerve Block	Stimuplex® HNS 12 with SENSE	Nerve stimulator	76
	Stimuplex® Accessories	Stimuplex® Pen, Knob	77
	Peripheral Nerve Block Overview	World market leader in Plexus anesthesia	78
	Stimuplex® Ultra 360	Improved visible needle for ultrasound guided PNB's	79
	Ultraplex® 360	Ultrasound optimized needle for "Single shot"-technique without nerve stimulation	80
	Stimuplex® D and A Needles	Needles for "Single-Shot"-technique with nerve stimulation	81
	Contiplex® S Ultra 360®, Contiplex® Tuohy Ultra 360®	Ultrasound optimized catheter sets with Perifix® ONE	83
	Contiplex® D Needles and Contiplex® D,	Needles and catheter sets for continuous plexus anesthesia with nerve stimulation	84
	Contiplex® Tuohy, Contiplex® S Catheter Sets	Catheter sets for continuous plexus anesthesia	86
Pain Therapy	Easypump® II ST-LT	Elastomeric pump for short-term (ST) and long-term (LT) infusion	87
	Easypump® C-bloc RA	Ambulatory elastomeric pump for Pain Therapy	89

B. Braun Regional Anesthesia... eXpect more



Choices of B. Braun epidural anesthesia sets

Epidural Anesthesia is one of the most popular techniques of Regional Anesthesia and post-operative pain treatment.

B. Braun is committed to provide excellent products to our customers which help to improve their daily routine.

B. Braun is able to offer a comprehensive range of epidural sets matching all needs and placement techniques containing one of two catheter types:

- Perifix® ONE which is best in field due to the flexibility of the distal tip which avoids paresthesia and vascular damage
- Perifix® Standard made of polyamide for most routine application

Perifix® ONE Catheter – Comfort and capability at your finger tips



Perifix® ONE catheter with introduction guide

Perifix® ONE catheter consists of a stiff polyamide core which is covered by a soft polyurethane outer layer. The soft outer surface of the catheter helps to avoid spontaneous paresthesia and confers comfort to the patient. The stiff core material allows full control during advancement and manipulation.

Main characteristics of the Perifix® ONE catheter:

- High success rates and fewer complications, easy and safe to place
- Six instead of normally three laser drilled micro holes create complete blocks through perfect spread without the risk of kinking
- Yellow color for increased safety, no confusion with other infusion lines
- Excellent x-ray visibility plus transparent catheter of the highest safety level (clear identification with x-ray, MRI compatible, early detection of blood or CSF reflux)
- Flexible catheter tip (4 cm) plus thermoelastic effect offers more comfort to the patient



Bilayer construction of Perifix® ONE showing three x-ray contrast stripes embedded in the polyamide inner core



- Unique two layer epidural catheter with inner core of polyamide and outer layer of soft polyurethane
- Optimized performance of Perifix® ONE catheter regarding smooth gliding inside the Tuohy needle and necessary stiffness for introduction
- Extreme easy gliding L.O.R. syringe for proper tactile feeling and safe and easy identification of the epidural space
- Perifix® PinPad (optional) for increased patient comfort
- Yellow coloring of set components (filter, catheter, catheter connector) to avoid danger of mix-ups with infusion lines

Ref. no.	Article	Basic Components*	8 ml LOR syringe, Luer	Perifix® PinPad	Omnifix® syringes Luer-Lock	Sterican® needles	Sales Unit/ pcs.
<i>Perifix® ONE set with G18 x 3 1/4" (1.3 x 80 mm) or G18 x 4 3/4" (1.3 x 120 mm) Tuohy needle</i>							
4514211C	Perifix® ONE 421	G18 x 3 1/4"	●	●	2, 20 ml	G18 x 1 1/2", G21 x 1 1/2", G25 x 5/8"	10
4514203C	Perifix® ONE 420	G18 x 3 1/4"	-	●	2, 10, 20 ml	G18 x 1 1/2", G21 x 1 1/2", G25 x 5/8"	10
4514513C	Perifix® ONE 451	G18 x 3 1/4"	●	●	-	-	20
4514017C	Perifix® ONE 401	G18 x 3 1/4"	●	-	-	-	20
4514009C	Perifix® ONE 400	G18 x 3 1/4"	-	-	-	-	20
4514183C	Perifix® ONE 418	G18 x 4 3/4"	●	●	-	-	20
<i>Perifix® ONE set with G16 x 3 1/4" (1.7 x 80 mm) Tuohy needle</i>							
4514319C	Perifix® ONE 431	G16 x 3 1/4"	●	●	2, 20 ml	G18 x 1 1/2", G21 x 1 1/2", G25 x 5/8"	10
4514025C	Perifix® ONE 402	G16 x 3 1/4"	●	●	-	-	20

For detailed information about PinPad, L.O.R. syringe, Perifix filter see page 69 and Perifix catheter fixation see page 70.

*Basic Components:

- Perican® Tuohy G 18 x 3 1/4" or G18 x 4 3/4" (1.3 x 80 or 120 mm, outer ø x length) with Perifix® ONE catheter G20 x 40" (0.85 x 0.45 x 1000 mm, outer x inner ø x length) with closed tip, tapered tip with 3 pairs of microholes or Perican® Tuohy needle G16 x 3 1/4" (1.7 x 80 mm, outer ø x length) with Perifix® ONE catheter G19 x 40" (0.85 or 1.05 x 0.45 x 1000mm, outer x inner ø x length), closed end, tapered tip with 3 pair of microholes
- Introduction guide for Perifix® ONE catheter
- Perifix® epidural flat filter, 0.2 µm, pressure resistant up to 7 bar
- Perifix® catheter connector G20 - G24, yellow or G19, transparent
- Label "Epidural", yellow

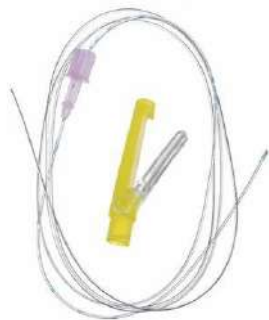
Perifix® ONE Paed – Filter sets for continuous epidural anesthesia / analgesia for small patients



Perifix® ONE Paed epidural sets in 20/24 G for newborns and infants, and 18/20 G for older children:

- Catheters with practice-related distance markings for pediatric use
- For safe catheter insertion and position control
- Tuohy needle with ½ cm marking for better control

Perican® (Tuohy needle)		Perifix® ONE Catheter		Perifix® Epidural filter	Syringes		Perifix® Pin Pad	Sales Unit/ pcs.	Ref. no.
G18 x 2" (1.3 x 50 mm) pink	G20 x 2" (0.9 x 50 mm) yellow	G20 x 38" (0.85 x 960 mm)	G24 x 29" (0.6 x 750 mm)		Omnifix® lock 2 ml	Perifix® L.O.R. 8 ml, luer			
●		●		●	●	●	●	10	4512006C
	●		●	●	●	●	●	10	4512014C

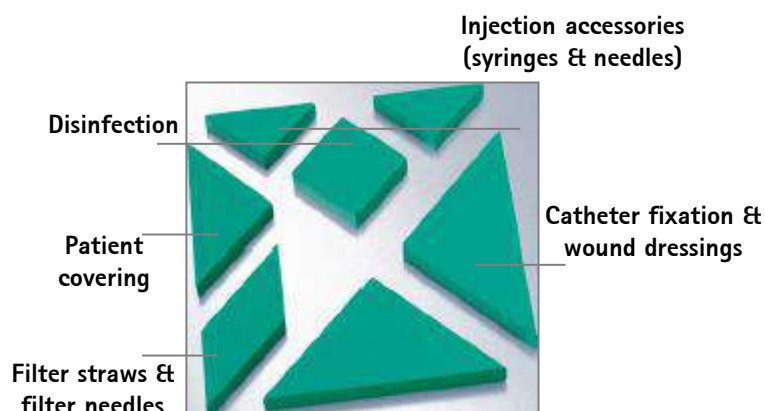


Perifix® Standard and Soft Tip catheters:

- Excellent shaft stability and kink resistance while still flexible for easy placement and removal
- Crystal clear for easy visualization of fluids
- Fully embedded x-ray lines and easy readable length markings for safe catheter placement

Ref. no.	Article	Perican® Tuohy needle	Epidural filter	8 ml LOR syringe, Luer	Perifix® PinPad	Omnifix® syringes Luer-Lock	Sterican® needles	Sales Unit/ pcs.
<i>Perifix® Standard set with G20 x 40" (0.85 x 1000 mm) catheter, central open tip</i>								
4516206	Perifix® 620	G18 x 3 1/4"	●	●	●	2, 10, 20 ml	G18 x 1 1/2", G21 x 1 1/2", G25 x 5/8"	10
4511000	Perifix® 100	G18 x 3 1/4"	—	—	—	—	—	20
<i>Perifix® Standard set with Perican® G18 (1.3x 80 mm) and G20 x 40" (0.85 x 1000 mm) catheter or Perican® G16 (1.7 x 80 mm) and G19 x 40" (1.05 x 1000 mm) catheter, closed tip with 3 lateral eyes</i>								
4514211	Perifix® 421	G18 x 3 1/4"	●	●	●	2, 20 ml	G18 x 1 1/2", G21 x 1 1/2", G25 x 5/8"	10
4514203	Perifix® 420	G18 x 3 1/4"	●	—	●	2, 10, 20 ml	G18 x 1 1/2", G21 x 1 1/2", G25 x 5/8"	10
4514513	Perifix® 451	G18 x 3 1/4"	●	●	●	—	—	20
4514017	Perifix® 401	G18 x 3 1/4"	●	●	—	—	—	20
4514009	Perifix® 400	G18 x 3 1/4"	●	—	—	—	—	20
4513010	Perifix® 301	G18 x 3 1/4"	—	●	—	—	—	20
4513002	Perifix® 300	G18 x 3 1/4"	—	—	—	—	—	20
4514319	Perifix® 431	G16 x 3 1/4"	●	●	●	2, 20 ml	G18 x 1 1/2", G21 x 1 1/2", G25 x 5/8"	10
4514300	Perifix® 430	G16 x 3 1/4"	●	—	●	2, 10, 20 ml	G18 x 1 1/2", G21 x 1 1/2", G25 x 5/8"	10
4514025	Perifix® 402	G16 x 3 1/4"	●	●	—	—	—	20
4513029	Perifix® 302	G16 x 3 1/4"	—	●	—	—	—	20
4513100	Perifix® 310	G16 x 3 1/4"	—	—	—	—	—	20

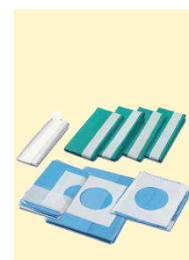
ProSet – The intelligent concept for optimizing your processes



- Spinal Anesthesia
- Epidural Anesthesia
- Combined Spinal & Epidural Anesthesia
- Peripheral Nerve Blocks







Safety only exists when all components in a process chain are optimally aligned with one another. The intelligent ProSet solution combines clinical requirements with your needs.

- Safety only exists when all components in a process chain are optimally aligned with one another. The intelligent ProSet solution combines clinical requirements with your needs.
- Tangram, the ancient Chinese puzzle consisting of seven pieces, is a synonym for the ProSet system solution. The individual alignment of Tangram pieces allows for a variety of combination options to form different mosaics.
- Similar to Tangram, we offer a range of selected components that can be used to fulfill your needs and medical requirements. ProSet's modular system helps to define standards and therefore increases the quality and safety of your work.
- ProSet – a variety of options to optimize your processes



Ref. no.	Article	Basic Components	LOR Syringe	Syringes and Needles	Accessory	Hygienic components	Drape	Sales Unit
4477308	Perifix® ONE	G18 x 3 1/4" Perican®, G20 x 1000 mm ONE catheter, 3 lateral eyes	Luer slip, 8 ml	3, 5, 10 ml Omnifix® Luer, Sterican G18 x 1 1/2", G26 x 1"	PinPad	2 prep sponges, 5 compress, 5 paper towel	75 x 90 cm/ 30"x36"; non-fenestrated	10
4476654	Perifix®	G18 x 3 1/4" Perican®, G20 x 1000 mm standard catheter, 3 lateral eyes	Luer slip, 8 ml	2, 5, 10ml Omnifix® Luer, Sterican G18 x 1 1/2", G26 x 1", G21 x 1 1/2"	Filter needle 1" (25mm), 5 µm PinPad	1 disposable forceps, 5 gaze pads, 5 compresses	45 x 75 cm/ 18"x30", fenestrated, 9 cm central hole	10
4459938	Perifix®	G18 x 3 1/4" Perican®, G20 x 1000 mm soft tip catheter, 3 lateral eyes	Luer slip, 8ml	5, 10ml Omnifix® Luer; Sterican G18 x 1 1/2", G23 x 1"	Filter straw 4" (100 mm), 5 µm PinPad	2 prep sponges, 5 compresses	45 x 75 cm/ 18" x 30", fenestrated, 9 cm central hole	10
4476263	Perifix® ONE	G18 x 3 1/4" Perican®, G20 x 1000 mm ONE catheter, 3 lateral eyes	Luer Lock, 8 ml	3, 5, 10ml Omnifix® Luer; Sterican G18 x 1 1/2", G21 x 1 1/2", G23 x 2 3/8", G26 x 1"	Filter straw 4" (100 mm), 5 µm PinPad	3 swab sticks, 5 compresses	45 x 75 cm/ 18" x 30", fenestrated, 9 cm decentral hole	10

Components of ProSet are packed in a tray with two separate depressions and wrapped with a field drape 75 x 90 cm (30"x36").

	Article	Description	Sales Unit/ pcs.	Ref. no.
<i>Perifix®- epidural catheter made of polyamide, length 100 mm, clear blue markings, completely embedded in the catheter material, threading assist guide and Perifix® catheter connector</i>				
<i>Perifix® ONE – polyamide/polyurethane bilayer catheter, length 1000 mm, threading assist guide , Perifix® catheter connector, label "Epidural"</i>				
	Perifix® catheter	G20 – 0.45 x 0.85 mm, closed tip, three lateral eyes	25	4513150
	Perifix® catheter	G19 – 0.6 x 1.05 mm, closed tip three lateral eyes	25	4513258
	Perifix® catheter	G20 – 0.45 x 0.85 mm, with central open tip	25	4513177
	Perifix® ONE catheter	G20 – 0,45 x 0,85 mm, closed tip, three pairs of microholes, yellow	25	4513150C
<i>Perifix® – catheter connector</i>				
	Perifix® catheter connector	Transparent – for G19 catheter	25	4513801
	Perifix® catheter connector	Yellow – for G20 and G24 catheter	25	4513800
<i>Perican® and Perican® Paed- epidural needle with Tuohy bevel</i>				
	Perican®	G18 x 4 1/4" – 1.3 x 120 mm – pink	25	4512453
	Perican®	G18 x 3 1/4" – 1.3 x 80 mm – pink	25	4512383
	Perican®	G18 x 6" – 1.3 x 150 mm – pink	25	4512200
	Perican®	G17 x 3 1/4" – 1.5 x 80 mm – red	25	4512588
	Perican®	G16 x 3 1/4" – 1.7 x 80 mm – white	25	4512782
	Perican® Paed	G18 x 2" – 1.3 x 50 mm – pink	25	4502302
	Perican® Paed	G20 x 2" – 0.9 x 50 mm – yellow	25	4502094
	Perican® Paed	G22 x 2" – 0.73 x 50 mm – black	25	4502078
<i>Epican® – epidural needle with 45° Crawford tip, Epican® Paed – caudal needle with 32° bevel</i>				
	Epican® Paed	G20 x 2" – 0.9 x 50 mm – yellow	25	4502426
	Epican® Paed	G22 x 1 3/8" – 0.73 x 35 mm – black	25	4502418
	Epican® Paed	G25 x 1 1/8" – 0.53 x 30 mm- orange	25	4502400
<i>Perifix® Loss of Resistance (L.O.R.) syringe</i>				
	Perifix® L.O.R.	Syringe for L.O.R. technique 8 ml, Luer-slip	25	4637100
	Perifix® L.O.R.	Syringe for L.O.R. technique 8 ml, Luer-Lock	25	4638107
<i>Perifix® filter and PinPad</i>				
	Perifix® filter	Epidural flat filter 0.2 µm, priming volume 0.55 ml, pressure resistant up to 7 bar	25	4515501
	Perifix® PinPad	Ideal fixation of Perifix® filter	25	4515510

Perifix® Catheter Fixation – The easy way of fixating a Regional Anesthesia catheter

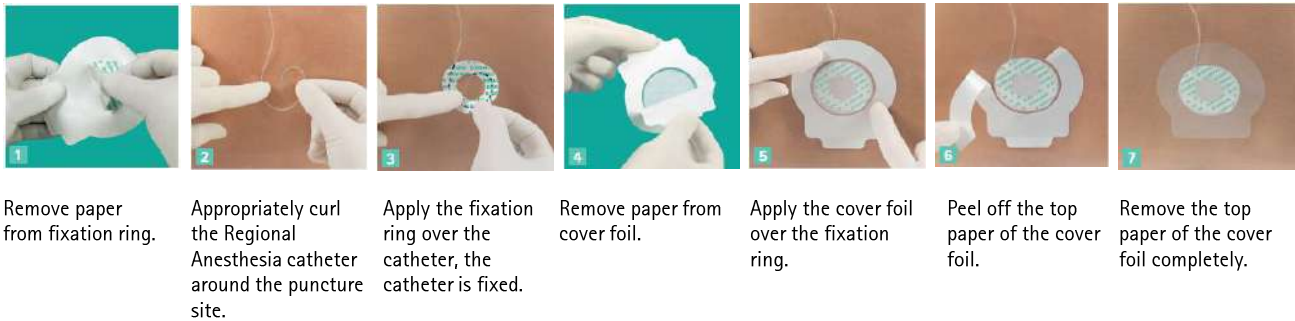


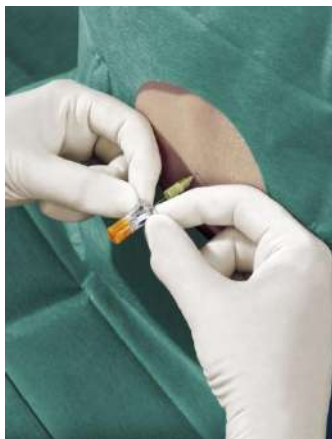
- The Perifix® Catheter Fixation combines easy handling with enhanced catheter safety.
- Secondary catheter migration can be easily avoided.
- The examination of the puncture site is possible without the risk of repositioning the catheter during the indwelling time.

Features and user benefits

- Fixation ring:
 - offers secure and easy fixation to prevent catheter migration
- Cover foil with non-adhesive center:
 - provides comfortable protection of puncture site
 - can easily be exchanged without risk of catheter displacement

Article	Description	Sales Unit/ pcs.	Ref. no.
Perifix® Catheter Fixation	Fixation ring and cover foil with non-adhesive center	25	4511200
Perifix® Catheter Fixation Cover	Cover foil with non-adhesive center	25	4511201





- Spinal Kits of B. Braun have been developed due to the request of anesthetists for high-quality procedure kits containing B. Braun spinal needles as a core component. A selection of components like filter straw or hygienic components or drapes have been added to form a complete Spinal Kit.
- According to personal habitudes the user can freely select between different components. Spinal Kits which have frequently been asked for by customers worldwide have been listed in the table below. If customers don't find an appropriate Kit, please inquire at B. Braun Melsungen for other Spinal Kits.



Ref. no.	Article	Spinal and introducer needle	Syringes and Needles	Accessory	Hygienic Components	Drape	Sales Unit/ pcs.
Sets with pencil point needle (Pencan®)							
4459237	Proset Pencan®	G25 x 3 1/2" Pencan®; G20 x 1 3/8"	3 ml, 5 ml Omnifix® Luer-slip, Sterican G21 x 1 1/2"; G26 x 1"	Filter straw 4", 5µm filter	2 prep sponges, 5 compresses, plaster 9x5 cm	45 x 75 cm; 18" x 30" fenestrated, 9 cm central hole	10
4470028	Proset Pencan®	G25 x 3 1/2" Pencan®; G20x 1 3/8"	3 ml, 5 ml Omnifix® Luer-slip, Sterican G21 x 1 1/2"; G26 x 1"	Filter needle 1", 5µm filter	1 disposable forceps, 5 gaze pads, 5 compresses	45 x 75 cm: 18" x 30" fenestrated, 10 cm central hole	10
4477663	Proset Pencan®	G27 x 3 1/2" Pencan®; G22x 1 3/8"	3 ml, 5 ml Omnifix® Luer-slip, Sterican G21 x 1 1/2"; G26 x 1"	Filter straw 4", 5µm filter	5 extra large gauze swabs, 5 gauze compresses, 1 disposable forecep	45 x 75 cm: 18" x 30" fenestrated, 9 cm decentral hole	10
4476425	Proset Pencan®	G27 x 3 1/2" Pencan®; G22 x 1 3/8"	3 ml, 5 ml, 10 ml Omnifix® Lock; Sterican® G18 x 1 1/2"; G21 x 1 1/2", G26 x 1"	—	2 prep sponges, 5 compresses	75 x 90 cm; 30" x 36", non-fenestrated	10

Pencan® / Spinocan® – Feel the difference in Spinal Anesthesia



Ergonomic Hub:

- Enhanced needle control
- Improved tactile feedback
- Better grip

Crystal Prism:

- Fast and easy identification of CSF flashback
- "Total reflection" – Prism shines silver before CSF enters the hub
- Transparency – Prism turns transparent when CSF enters the hub



User benefits

- Ergonomic hub designed for enhanced needle control, improved grip and tactile feedback
- Fast and easy identification of the CSF backflow in the needle hub
- Introducer design provides more usable spinal needle length
- Similar handling as with an epidural needle is possible

Spinocan®, Pencan®, Atraucan® – Needles for spinal anesthesia, diagnostic lumbar puncture and cytologic biopsies

Pencan®

- Total reflection effect
- Pencil point needle tip with lateral opening (like Whitacre® from B-D/VYGON or Sprotte® from Pajunk)
- Distinct feeling of the dural click

Atraucan®

- Special bevel design to reduce post dural puncture headache
- Two-zone atraumatic bevel design

Spinocan®

- With Quinke bevel



Color		Size		Spinocan®	Pencan®	Atraucan®	Sales Unit/ pcs.
		G / inch	mm				
pink	G18	G18 x 3"	1.3 x 75	4501373-13			25
		G18 x 3 1/2"	1.3 x 88	4501390-01			25
ivory	G19	G19 x 1 1/2"	1.1 x 40	4501144-13			25
		G19 x 3 1/2"	1.1 x 88	4501195-13			25
yellow	G20	G20 x 3"	0.9 x 75	4509757-13			25
		G20 x 3 1/2"	0.9 x 88	4509900-01			25
black	G22	G22 x 1 1/2"	0.7 x 40	4507401-13			25
		G22 x 3"	0.7 x 75	4507754-13			25
		G22 x 3 1/2"	0.7 x 88	4507908-01	4502035-13		25
		G25 x 1"	0.50 x 25		4502167-13		25
orange	G25	G25 x 2"	0.50 x 50		4502159-13		25
		G25 x 3"	0.50 x 75	4505751-01			25
		G25 x 3 1/2"	0.50 x 88	4505905-01	4502019-01		25
brown	G26	G26 x 1"	0.45 x 25			4504771	25
		G26 x 2"	0.45 x 50			4504763	25
		G26 x 3 1/2"	0.45 x 88	4502906-01			25
grey	G27	G27 x 2"	0.40 x 50		4502175-13		25
		G27 x 3 1/2"	0.40 x 88	4503902-01	4502027-01		25

All spinal needles with transparent lock hub and color-coded stylet hub. Whitacre® is a trademark of Becton-Dickinson. and Sprotte® from Pajunk.





Extra long spinal needles



Color	Size		Spinocan®	Pencan®	Atraucan®	Sales Unit/ pcs.
	G / inch	mm				
■ black	G22 x 4 3/4"	0.70 x 120	4506090-13			25
■ orange	G25 x 4 3/4"	0.50 x 120	4505913-13	4502120-13		25
	G25 x 6 1/4"	0.50 x 156,5		333877		25
■ brown	G26 x 4 3/4"	0.45 x 120	4504917-13			25
■ grey	G27 x 4 3/4"	0.40 x 120	4502140-13			25
	G27 x 4 3/4"	0.40 x 120		4502132-13		25
■ red	G29 x 4 3/4"	0.33 x 120	4501918-13			25

Spinal needle sets with introducer needles



Color	Size		Introducer Needle	Spinocan®	Pencan®	Atraucan®	Sales Unit/ pcs.
	G / inch	mm					
Spinal needle sets with introducer needle							
 orange	G25 x 3 1/2"	0.50 x 88	G20 x 1 3/8"		4502043-13		25
	G25 x 4"	0.53 x 103	G20 x 1 3/8"		4502116-13		25
 brown	G26 x 3 1/2"	0.45 x 88	G20 x 1 3/8"			4504739	25
 grey	G27 x 3 1/2"	0.40 x 88	G22 x 1 3/8"		4502051-13		25
	G27 x 4"	0.42 x 103	G22 x 1 3/8"		4502124-13		25
 red	G29 x 3 1/2"	0,33 x 88	G22 x 1 3/8"	4501900-13			25
Introducer needles							
G20	G20 x 1 3/8"	0.9 x 35	introducer needle for Spinocan®, Pencan® and Atraucan®, spinal needles up to max. 0.53 mm (G25)			4505000-13	25
G22	G22 x 1 3/8"	0.7 x 35	introducer needle for Spinocan® and Pencan®, spinal needles up to max. 0.47 (G27)			4500059-13	25

All spinal needles with transparent lock hub and color-coded stylet hub.

Espocan® – Combined Spinal / Epidural Anesthesia Set (CSE)

**System for Combined Spinal-Epidural Anesthesia**

Combined Spinal Epidural Anesthesia (CSE) combines the advantages of Spinal and Epidural Anesthesia, the two major and well-established Regional Anesthesia techniques, which are used extensively in surgery and pain relief. The conventional single interspace needle-through-needle approach was further improved by the development of a special Tuohy needle with an aperture (a back-eye) in the curved tip and a spinal needle with a plastic centering sleeve. This is the core of the perfect team of highest quality and well proven devices including Perifix® LOR syringe, epidural catheter, catheter connector as well as the Perifix® filter with PinPad. The perfect team you can always rely on.

**User benefits for safe application**

Perfectly matching components for a safe procedure

- Back-eye in Tuohy needle for safe insertion of spinal needle
- Docking system for safe fixation of spinal needle
- Sleeved spinal needle for smooth exit through the Tuohy needle back-eye and optimal tactile feedback

Espocan® and Perifix® Standard	Size	Length (mm)	Needle ø (mm)	Length (inch)	Sales Unit/ pcs.	Ref. no.
	<i>With Quincke needle: Spinocan®</i>					
	27 G	125.5	0.42	5"	10	4556674
	<i>With Pencil point needle: Pencan®</i>					
	27 G	125.5	0.42	5"	10	4556674

All sets include:

- Perifix® Standard catheter, 20 G, 3 lateral eyes
- Perican® epidural needle ø 1.3 mm, 18 G x 3 1/2"
- Perifix® Loss-of-Resistance (LOR) syringe, Luer-Slip
- Perifix® epidural flat filter 0.2 µm
- Perifix® PinPad – Perifix® catheter connector



Espocan® and Perifix® Soft Tip and Docking System	Size	Length (mm)	Needle ø (mm)	Length (inch)	Sales Unit/ pcs.	Ref. no.
	<i>With Quincke needle: Spinocan®</i>					
	27 G	136.5	0.42	5 3/8"	10	4556747
	<i>With Pencil point needle: Pencan®</i>					
	27 G	138.5	0.42	5 3/8"	10	4556763

All sets include:

- Perifix® Soft Tip catheter, 20 G, 3 lateral eyes
- Docking system- Perican® epidural needle ø 1.3 mm, 18 G x 3 1/2"
- Perifix® Loss-of-Resistance (LOR) syringe, Luer-Slip
- Perifix® epidural flat filter 0.2 µm
- Perifix® PinPad – Perifix® catheter connector



Stimuplex® HNS 12 with SENSE* – Nerve stimulator



- Large full graphics display
- 26 languages (e. g. Russian, Spanish, French, English)
- The following information is displayed on the stimulation screen at all times:
 - Stimulus amplitude in mA (large digits)
 - Max. current range
 - Stimulus duration in ms
 - Stimulus frequency in Hz
 - Load impedance in kΩ
 - Charge delivered (in nC, if activated)
- Eye-catching warning on display and warning sound
- Digital Control Knob
- Convenient menu navigation using four arrow keys

Technical data Stimuplex® HNS 12

Battery: 9 V (alkaline)
Power consumption: 6 mA (8 mA max.)
Stimulation current: \hat{i} = 5 mA (max.) (0-12 k)
Stimulation voltage: \hat{U} = 95 V (max.)
Stimulation frequency: 1 Hz / 2 Hz \pm 1%
Stimulus duration: 0.05 ms – 0.1 ms – 0.3 ms – 0.5 ms – 1.0 ms \pm 1%
Allowable load impedance: 0 k – 12 k
Current measuring accuracy: \pm 0.02 mA
Impedance measuring range: 1 kΩ – 90 kΩ for target stimulation current > 0.5 mA
Impedance measuring accuracy: \pm 10% for stimulation current > 1 mA
 \pm 20% for target stimulation current \leq 1 mA

User benefits

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

SENSe* Advantages

*SENSe:
Sequential Electrical Nerve Stimulation means delivery of a series of three electrical impulses (3Hz) but with varying impulse duration. First two impulses have the preset impulse length e.g. 0.1 ms whereas the third is extended. This third impulse helps to induce a muscle stimulation even when the first two don't. The SENSE software integrated into the Stimuplex® HNS 12 avoids ambiguity and speeds up the time until achieving a complete block.

Source: W. Urmey et al. Regional Anesthesia and Pain Medicine 2006, Volume 31 (5): 463-469

Article	Ref. no.
Stimuplex® HNS 12 with electrode cable for all Stimuplex® and Contiplex® needles, 9 V block battery, 10 kΩ resistance, plastic transport box, operating instructions	4892098

Stimuplex® Pen



- Stimuplex® Pen for percutaneous nerve mapping to facilitate localisation of nerve and correct orientation of the puncture needle
- Suited to demonstrate muscular response after stimulating the nerve with a nerve stimulator
- Optimal nerve localisation is prerequisite to a fast onset of the peripheral nerve block

Knob for special handling



- Knob of stainless steel fitting to control knob of Stimuplex® HNS 12
- Knob can be sterilized by steam
- Remote Control for simultaneous puncture and current adjustment by physician without need for assistance staff
- Acoustic control of current adjustment still functioning
- Can be used with Stimuplex® HNS 12 or Stimuplex® DIG RC or HNS 11
- Safe placement of Remote Control in the anesthetists palm
 - easy fixation with two finger rings
 - sterile handling due to glove to be put on the usual way
- Operation of Remote Control by two small "Up" and "Down" buttons only

Technical data Remote Control

Fixing:	via finger rings on the palm
Sterility:	to be placed under the sterile glove
Adjustment:	set required current value by pressing the buttons "Up" or "Down"
Connection:	via steering-cable to the tripolar output socket on the front panel
Case (housing):	plastic
Dimensions:	11.4 x 7.2 x 3.3 cm

Article	Ref. no.
Stimuplex® Pen for Stimuplex® HNS 11 and Stimuplex® HNS 12	4892099
Knob for special handling for Stimuplex® HNS 12	4892283
<i>Spare parts</i>	
Electrode cable for Stimuplex® HNS 12, length 125 cm	4892070
Plastic transport box HNS 12, black	4892095
Electric resistance element for testing of HNS 12, 10 kΩ	4892096
Cover for battery case of HNS 12	4892094

B. Braun – World market leader in Plexus Anesthesia



B. Braun has reacted on the tremendous interest in peripheral nerve block techniques (here called Plexus Anesthesia) during the last years, by stepwising diversifying our range of needles and catheter sets. The latest addition are:

- Stimuplex® Ultra 360® needle for ultrasound guided Plexus Anesthesia
- Contiplex® S Ultra 360® with Perifix® ONE catheter
- Contiplex® Tuohy Ultra 360® with Perifix® ONE catheter

An overview is presented in the schematic drawing below:

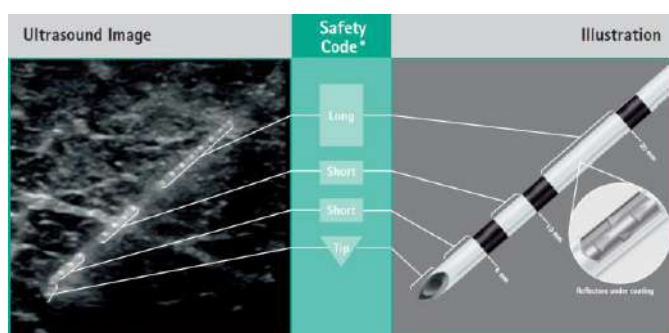
	Nerve Stimulation & Ultrasound
Single Shot Technique	<ul style="list-style-type: none"> ■ Stimuplex® D ■ Stimuplex® A ■ Stimuplex® Ultra 360® ■ Ultraplex® 360
Continuous Technique	<ul style="list-style-type: none"> ■ Contiplex® D with Perifix® catheter ■ Contiplex® S with Perifix® catheter ■ Contiplex® Tuohy with Perifix® catheter ■ Contiplex® S Ultra 360® with Perifix® ONE catheter ■ Contiplex® Tuohy Ultra 360® with Perifix® ONE catheter

1: Maecken et al.: Ultrasound Characteristics of Needles for Regional Anesthesia. Reg Anesth Pain Medicine 2007 32(5): 440-447; Stimuplex® A & D needles showed high values of ultrasound visibility in an animal model amongst 12 different needle brands
 2: Koscielniak-Nielsen ZJ et al.: Long-axis ultrasound imaging of the nerves and advancement of perineural catheters under direct supervision: a preliminary report of four cases. Reg Anesth Pain Medicine 2008, 33 (5): 477-482

Stimuplex® Ultra 360® – Stimulation needle with insulation free bevel Ultrasound optimized



- For nerve stimulation and ultrasound
- X-pattern ultrasound reflectors with safety code
- Well-approved 30° facet bevel with back cut
- High quality low friction coating
- 50 cm long DEHP-free injection tubing for immobile needle technique
- Length markings every cm on the needle for a safer advancing



User benefits

- Echogenic X-pattern markings facilitate needle visualization with minimal acoustic shadowing.¹
- 50 cm long DEHP-free injection tubing. Same good puncture and gliding behavior of the cannulas.
- Ultrasound reflectors around whole shaft for easy needle detection.

Bevel Angle	Needle size				Sales Unit/ pcs.	Ref. no.
	G	Ø mm	inch	Length mm		
30°	22	0.7	1 3/8"	35	25	4892503-01
30°	22	0.7	2"	50	25	4892505-01
30°	22	0.7	3 1/8"	80	25	4892508-01
30°	20	0.9	4"	100	25	4892510-01
30°	20	0.9	6"	150	25	4892515-01

Ultrplex® 360 – Ultrasound optimized needle without nerve stimulation



- A non-stimulating needle for ultrasound only
- 360 degree X-pattern reflectors ensuring visibility from all sides
- X-pattern ultrasound reflectors with safety code
- Well-approved 30° facet bevel with back cut
- High quality low friction surface
- 50 cm long DEHP-free injection tubing for immobile needle technique

G	Cannula			Sales Unit/ pcs.	Ref. no.
	inch	ø mm	length mm		
22	1 3/8"	0.70	35	25	4892603-01
22	2"	0.70	50	25	4892605-01
22	3 1/8"	0.70	80	25	4892608-01
20	4"	0.90	100	25	4892610-01
20	6"	0.90	150	25	4892615-01

Stimuplex® D / Stimuplex® A – Needle for „Single Shot“-technique with nerve stimulation



Stimuplex® A

Stimuplex® D

User benefits for safe application

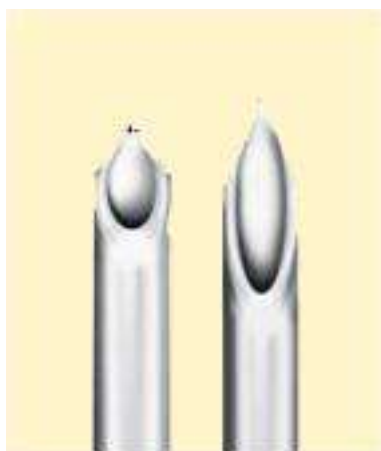
- Excellent puncture and gliding characteristics
- Comprehensive assortment of needle lengths from 35 to 150 mm G25 to G20 sizes
- Ergonomic needle hub for enhanced tactile feedback

Stimuplex® A

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

Stimuplex® D

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



Stimuplex® D / Stimuplex® A – Needles for plexus anesthesia

Code	Bevel Angle	Needle size				Sales Unit/ pcs.	Ref. no.
		G	Ø	Length			
			mm	inch	mm		
Stimuplex® D needle, white electric insulation of needle and bevel, length marking every cm, additional marking for 5, 10 and 15 cm							
D25/035	15°	25	0.50	1 1/3"	35	25	4894103N
D25/055	15°	25	0.50	2 1/8"	55	25	4894111N
D26/040	15°	23	0.60	1 1/2"	40	25	4894120N
D26/070	15°	23	0.60	2 3/4"	70	25	4894138N
D27/050	15°	22	0.70	2"	50	25	4894146N
D27/080	15°	22	0.70	3 1/8"	80	25	4894154N
D27/120	15°	22	0.70	4 3/4"	120	25	4894162N
D29/150	15°	20	0.90	6"	150	25	4894170N
D17/040	30°	22	0.70	1 1/2"	40	25	4894189N
D17/050	30°	22	0.70	2"	50	25	4894197N
D17/080	30°	22	0.70	3 1/8"	80	25	4894200N
Stimuplex® A, needle with 30° bevel, transparent electric insulation of needle, length markings every cm additional marking for 5, 10 and 15 cm							
A 25	30°	24	0.55	1"	25	25	4894251
A 25	30°	22	0.70	1"	25	25	4894539
A 35	30°	22	0.70	1 1/8"	35	25	4894367
A 50	30°	22	0.70	2"	50	25	4894502
A 50	30°	21	0.80	2"	50	25	4894375
A 100	30°	21	0.80	4"	100	25	4894260
A 150	30°	20	0.90	6"	150	25	4894278

Contiplex® Ultra 360® – Ultrasound optimized catheter sets with Perifix® ONE catheter



- New Contiplex® Ultra 360® Sets fully equipped with well-proven Perifix® ONE catheter
- Perifix® ONE catheter with good ultrasound visibility
- Double layer of polyamide and polyurethane of Perifix® ONE catheter strongly enhances the reflection pattern under ultrasonography
- Good visibility of catheter improves block outcome

Perifix® ONE catheter mm	Bevel Angle	Contiplex® Ultra 360® needle				Sales Unit/ pcs.	Ref. no.
		Ø		Length			
		G	mm	inch	mm		
Contiplex® S Ultra 360® set, steel needle with side port adapter, catheter connector, Perifix® Filter and Perifix® Pin Pad, Omnifix® Luer-Lock 5 ml							
0.45 x 0.85 x 1000	20°	18	1.3	2"	50	10	4898650-27
	20°	18	1.3	4"	100	10	4898610-27
	20°	18	1.3	6"	150	10	4898615-27
Contiplex® Tuohy Ultra 360® sets, G18 x 1.3 mm Tuohy needle with side port adapter, catheter connector, Perifix® Filter and Perifix® Pin Pad, Omnifix® Luer-Lock 5 ml							
0.45 x 0.85 x 400	Tuohy	18	1.3	1 ½"	40	10	4898704-01
	Tuohy	18	1.3	2"	50	10	4898705-01
0.45 x 0.85 x 1000	Tuohy	18	1.3	4"	100	10	4898710-01
	Tuohy	18	1.3	6"	150	10	4898715-01

Contiplex® D, Contiplex® S – Needles and catheter sets for continuous plexus anesthesia with nerve stimulation



left: Contiplex® D with 15° and 30° bevel
right: Contiplex® S with 20° bevel



Contiplex® D, Contiplex® S

Contiplex® D Cannula for short-term catheter technique

- Insulated needle like Stimuplex® D surrounded by short radio-opaque capillary
- New, extended (50 cm) tubing for easier manipulation during injection
- Needle available with 15° and 30° bevel

Contiplex® D Set with standard catheter

- Contiplex® D cannula 15° or 30° bevel with short radio-opaque capillary
- Contiplex® catheter, transparent, made of polyamide with clear blue markings
- Omnifix® lock syringe, 5 ml
- Perifix® catheter connector, Perifix® filter, Perifix® PinPad
- Contiplex® D G20 sets, in addition: indwelling stabilising wire in the catheter

Contiplex® S Set with standard catheter

- Needle with 20° bevel; without short radio-opaque capillary
- Allows both nerve stimulation and aspiration / injection
- With sideport to ease insertion of catheter
- Omnifix® lock syringe 5 ml
- Perifix® catheter connector, Perifix® filter, Perifix® PinPad

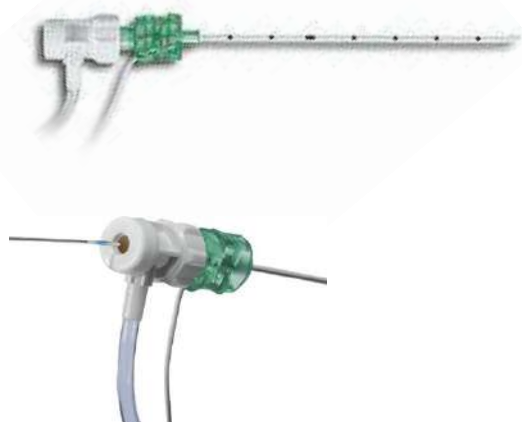
Contiplex® D – Cannula for continuous plexus anesthesia

Code	Bevel Angle	Needle size				Sales Unit/ pcs.	Ref. no.
		G	ø mm	inch	mm		
Contiplex® D – cannula with 15° bevel, ergonomic hub							
D28/055/C	15°	18	1.3	2 1/8"	55	25	4894219N
D28/110/C	15°	18	1.3	4 3/8"	110	25	4894294N
Contiplex® D – cannula with 30° bevel, ergonomic hub							
D18/055/C	30°	18	1.3	2 1/8"	55	25	4894227N

Contiplex® D and Contiplex® S – Catheter sets for continuous plexus anesthesia

Contiplex® catheter mm	Bevel Angle	Contiplex® needle				Sales Unit/ pcs.	Ref. no.
		ø		Length			
		G	mm	inch	mm		
Contiplex® D set, G18, capillary catheter with ergonomic hub, catheter connector, Perifix® Filter and Perifix® Pin Pad, Omnifix® Luer-Lock 5 ml							
0.45 x 0.85 x 400	15°	18	1.3	2 1/8"	55	10	4894235N
0.45 x 0.85 x 400	30°	18	1.3	2 1/8"	55	10	4894243N
0.45 x 0.85 x 1000	15°	18	1.3	3 1/8"	80	10	4895819N
0.45 x 0.85 x 1000	15°	18	1.3	4 3/8"	110	10	4894391N
Contiplex® D set, G20, capillary catheter with ergonomic hub, catheter connector, Perifix® Filter and Perifix® Pin Pad, Omnifix® Luer-Lock 5 ml							
0.41 x 0.71 x 400	15°	20	1.1	1 1/3"	33	10	4892402N
0.41 x 0.71 x 400	15°	20	1.1	2 1/8"	55	10	4892410N
Contiplex® S set, steel needle with side port adapter, catheter connector, Perifix® Filter and Perifix® Pin Pad, Omnifix® Luer-Lock 5 ml							
0.45 x 0.85 x 500	20°	18	1.3	2"	50	10	4898750
0.45 x 0.85 x 500	20°	18	1.3	4"	100	10	4898752
0.45 x 0.85 x 1000	20°	18	1.3	6"	150	10	4898754

Contiplex® Tuohy – Catheter set for continuous plexus anesthesia



Contiplex® Tuohy Catheter Set

- Fully insulated Tuohy type needle for plexus anesthesia
- Tuohy curve for pointed catheter placement
- New ergonomic hub for maximum tactile feeling
- Pin-point electrode for accurate stimulus-guided needle advancement
- With sideport to ease aspiration or injection and simple insertion of the catheter
- Omnifix® lock syringe 5 ml
- Perifix® catheter connector, Perifix® filter, Perifix® PinPad
- Label "Nerve Block", green

Contiplex® catheter mm	Tuohy cannula with new hub				Sales Unit/ pcs.	Ref. no.
	G	ø mm	Length inch	mm		
0.45 x 0.85 x 500	18	1.3	1 ½"	40	10	331695N
0.45 x 0.85 x 500	18	1.3	2"	50	10	331691N
0.45 x 0.85 x 500	18	1.3	4"	100	10	331693N
0.45 x 0.85 x 1000	18	1.3	6"	150	10	331694N

Easypump® II ST – LT – Elastomeric pump for short and long term infusion



Prescribe 'Home and Mobility'

Newly available
from B. Braun

Home is the best therapy. We are well aware of that. For this reason B. Braun developed a solution for the treatment of patients who need antibiotic or chemotherapy: *Easypump® II*

The elastomeric infusion pump enables physicians to relocate medical therapy to the outpatient care. While patients benefit from a rapid mobilization, hospitals profit from a reduced length of stay. *Easypump® II* – experience the options.

- Can be used in chemotherapy, antibiotics and IV pain management either in adults and pediatric patients
- High comfort for the patient inside the hospital but also for outpatient treatment due to small configuration and no maintenance (no alarm, no battery)
- Carry pouches allow unrestricted movement of patients during recreation/rehabilitation
- Integrated air venting and particulate filter
- **Latex-free product portfolio**
- **DEHP-free**
- Small and light (especially as therapy progresses)
- When filled to nominal volume, the flow accuracy is +/- 15 %



User benefits

- Reduced work load for healthcare workers
- Safe and flexible therapy options
- Suitable for hospital and home use
- Discrete and comfortable therapy

Description

Easypump® II elastomeric infusion pumps are designed to give clinicians and nurses the option to deliver pre-determined amounts of medication to the patient in a continuous and accurate manner, either in the hospital or at home.

Easypump® II is independent from main power supplies or batteries, enabling the patient to be treated in an ambulatory manner. Medication is delivered to the patient by positive pressure applied by the elastomeric membrane. The flow rate is determined by the combination of the flow regulation device (flow restrictor) and the positive pressure of the elastomeric membrane. This pressure delivers the solution against the back-pressure of catheters and blood pressure in the veins. Back-pressure affects the flow rate.

Product Specifications	Nominal filling volume	Nominal flow rate	Nominal infusion time	Ref. no.
<i>Easypump® II LT (long-term-infusion time)</i>				
Easypump® II LT 60-12-S	60 ml	5 ml/h	12 h	4540002
Easypump® II LT 500-12.5-S	500 ml	40 ml/h	12.5 h	4540003
Easypump® II LT 80-16-S	80 ml	5 ml/h	16 h	4540004
Easypump® II LT 125-25-S	125 ml	5 ml/h	25 h	4540006
Easypump® II LT 270-27-S	270 ml	10 ml/h	27 h	4540008
Easypump® II LT 60-30-S	60 ml	2 ml/h	30 h	4540010
Easypump® II LT 120-30-S	120 ml	4 ml/h	30 h	4540012
Easypump® II LT 400-40-S	400 ml	10 ml/h	40 h	4540014
Easypump® II LT 100-50-S	100 ml	2 ml/h	50 h	4540016
Easypump® II LT 270-54-S	270 ml	5 ml/h	54 h	4540018
Easypump® II LT 120-60-S	120 ml	2 ml/h	60 h	4540020
Easypump® II LT 100-67-S	100 ml	1.5 ml/h	67 h	4540024
Easypump® II LT 270-68-S	270 ml	4 ml/h	68 h	4540026
Easypump® II LT 400-80-S	400 ml	5 ml/h	80 h	4540022
Easypump® II LT 400-100-S	400 ml	4 ml/h	100 h	4540028
Easypump® II LT 65-130-S	65 ml	0.5 ml/h	130 h	4540030
Easypump® II LT 270-135-S	270 ml	2 ml/h	135 h	4540032
Easypump® II LT 300-150-S	300 ml	2 ml/h	150 h	4540034
Easypump® II LT 100-200-S	100 ml	0.5 ml/h	200 h	4540036
Easypump® II LT 270-270-S	270 ml	1 ml/h	270 h	4540038
<i>Easypump® II ST (short-term-infusion time)</i>				
Easypump® II ST 100-0.5-S	100 ml	200 ml/h	0.5 h	4540040
Easypump® II ST 250-0.5-S	250 ml	500 ml/h	0.5 h	4540042
Easypump® II ST 50-1-S	50 ml	50 ml/h	1 h	4540044
Easypump® II ST 100-1-S	100 ml	100 ml/h	1 h	4540046
Easypump® II ST 250-1-S	250 ml	250 ml/h	1h	4540048
Easypump® II ST 250-1.5-S	250 ml	167 ml/h	1.5h	4540050
Easypump® II ST 400-2-S	400 ml	200 ml/h	2 h	4540052
Easypump® II ST 500-2-S	500 ml	250 ml/h	2 h	4540054
Easypump® II ST 100-2-S	100 ml	50 ml/h	2 h	4540056
Easypump® II ST 400-4-S	400 ml	100 ml/h	4 h	4540058

All Easypump® II ST-LT variants are provided in boxes of 10 units.

Classification: Easypump® II elastomeric pumps are manufactured according to ISO 13485 and are in conformity with the following standards: - European Community (CE Mark) class IIb Medical Device Directive (MDD); - Product certified TÜV Product Service No. 0123 in accordance with 93/42/EEC; - ISO 28620: 2010 (E), particular requirements for the safety of infusion pumps and controllers.

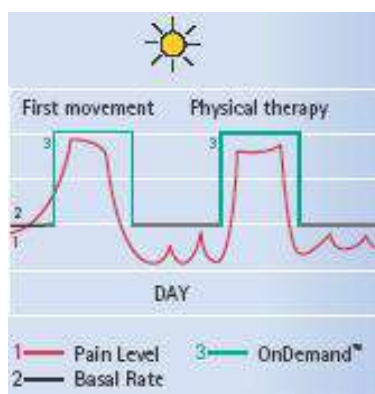
Easypump® C-bloc RA – Ambulatory elastomeric pump for Pain Therapy



Elastomeric balloon

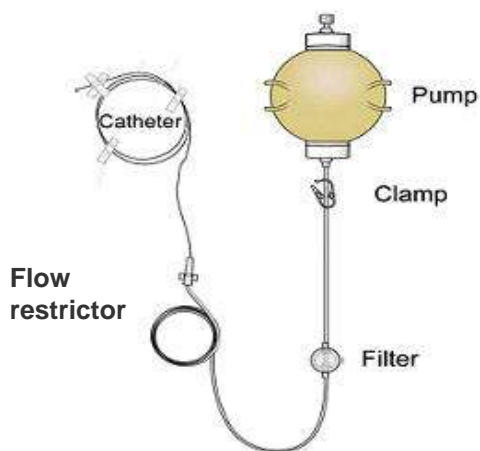


left: On-Demand™ piston for patient control analgesia
right: Select-A-Flow™ device for adjusting the flow rate







Principle of patient controlled analgesia using the On-Demand™ device

- Elastomeric pump without any mechanical or motor driven parts for continuous infusion of pain relieving drugs – single use for one patient
- 3-layer balloon with damage resistant outer shell and chemical inert inner layer (stability data for 35 drugs available)
- Middle, elastomeric layer made from latex provides continuous flow (accuracy $\pm 15\%$)
- Latex layer is completely embedded and does not have any contact to the anesthetic drug
- High comfort for the patient inside the hospital but also for outpatient treatment due to small configuration and no maintenance (no alarm, no battery)
- Carry pouches allow unrestricted movement of patients during recreation/rehabilitation
- Three fixed flow models (5, 8 or 10 ml/h) and four models with flexible flow rate or bolus function for improved patient satisfaction
- On-Demand™ device for patient controlled analgesia (PCA) allows additional infusion of local anesthetic drug (5 ml bolus) during peaks of pain sensation
- Select-A-Flow™ device replaces the standard flow restrictor and enables the medical doctor to adjust the basal flow rate according to the level of pain sensation. For example immediately after surgery a flow rate of 14 ml/h is chosen whereas at later time the flow rate could be reduced to 8 ml/h or even 2 ml/h






Specification of Easypump® C-bloc RA with fixed flow rate:

- Elastomeric balloon, 400 ml or 270 ml with Luer-Lock hub for filling
- Infusion line, fully transparent, with clip, flow restrictor and Luer-Lock hub
- Flow restrictor (fixation on patient skin!)
- Filter: 1,2 µm particulate; 0,02 µm air eliminating
- When filled to nominal volume, the flow accuracy is +/- 15 %

Product Specifications	Color Code/Flow Rate	Filling Volume	Sales Unit/ pcs.	Ref. no.
Easypump® C-bloc™ RA Fixed Flow Rate	 5 ml/h	400 ml	10	4440003
Easypump® C-bloc™ RA Fixed Flow Rate	 8 ml/h	400 ml	10	4440004
Easypump® C-bloc™ RA Fixed Flow Rate	 10 ml/h	400 ml	10	4440005
Easypump® C-bloc™ RA Fixed Flow Rate + OnDemand™ (5 ml Bolus, 60 minutes lock-out period)	 5 ml/h	400 ml	10	4440006
Easypump® C-bloc™ RA + Select-A-Flow™	2 ml/h – 14 ml/h	400 ml	10	4440007
Easypump® C-bloc™ RA + Select-A-Flow™ + OnDemand™ (5 ml Bolus, 30 minutes lock-out period)	2 ml/h – 14 ml/h	400 ml	5	4440008
Easypump® Carry Pouch				
Carry Pouch for Easypump® Classic pouch small			1	4434447
Carry Pouch for Easypump® Classic pouch large			1	4434455
Carry Pouch for Easypump® Thermoisolated pouch			1	4438102

Select-A-Flow™ unit: 2 ml/h – 14 ml/h (7 steps of 2 ml/h increments) or 1 ml/h – 7 ml/h (7 steps of 1 ml/h increments)

Color-coded rings on the filling port indicate the following flow rates:  5 ml/h  8 ml/h  10 ml/h

		Page
Infusion Pumps, Workstations, Accessories	B. Braun Space	Managing Infusion Therapy 92
	Space Online Suite	Safe and Efficient Infusion Management 93
	B. Braun Space GlucoseControl	Blood Glucose Control 94
	B. Braun Space	Ordering data 95
	Perfusor® compact	Syringe pump for use on all wards 96
	Perfusor® compact S	Syringe pump for pediatrics and neonatology 97
	Infusomat® fmS	Volumetric infusion pump for anesthesia and intensive care 98
	Infusomat® P	Volumetric infusion pump for use with Intrafix® Primeline IV administration sets 99
	Original Perfusor®-Syringes	For use with the Perfusor® syringe pumps 100
	Original Perfusor® -Tubings	For use with the Perfusor® syringe pumps 101
	Infusomat® Space Lines	For use with Infusomat® Space & Infusomat® fmS 102
	Braunostat®	Infusion stands 103

B. Braun Space – Managing Infusion Therapy



Description

- B. Braun Space makes it possible to standardize infusion systems throughout an entire hospital and answers the requirements of a variety of therapeutic fields.
- Each available Space pump can be used for standard applications in basic wards, for advanced infusion therapy in ICU and OR.
- Each pump can be upgraded with special functions like TCI pump for anesthesia or PCA for post-operative pain treatment.
- As a result, each Perfusor® or Infusomat® Space can replace several special pumps.
- B. Braun Space improves availability and simplifies logistical processes.
- Especially when automatic therapy documentation is required – or is scheduled for the future – it is essential to have standardized data protocols. B. Braun Space makes hospital wide plug-and-play IT integration viable.

User benefits

- The small size and low weight (1.4 kg) of the B. Braun Space pumps promotes patient comfort and mobility.
- Flexible and simple handling, thanks to powerful batteries and innovative modular concept.
- Minimal space requirements in Helicopters, jets and ambulance cars. Certified according to EN 1789 (Mobile Intensive Care Unit) and EN 13718-1 (Air, water and difficult terrain ambulances)
- The Space Station is a compact workstation for up to 24 infusion pumps that offers a complete overview of the medical therapy at a glance and a simple plug-and-play IT/PDMS integration.
- Increased safety, decreased effort with Space drug library and pre-configured dose rate calculation.
- TCI function for Propofol® (March plasma targeting, Schnider plasma and effect site targeting) and Remifentanyl (Minto plasma and effect site targeting)
- Protect your budget by using Space PCA for both IV- and regional analgesia
- With the SpaceStation MRI each Space Pump can even be used in the MRI environment.



B. Braun Space OnlineSuite – Safe and Efficient Infusion Management

The Space OnlineSuite software offers a variety of applications which optimize typical hospital processes. The software provides existing and future software solutions in an integrated, standardized and web-based approach. The Space OnlineSuite is a server based software and the applications can be used via a browser from a client computer in the network.

The following software modules are available:

1. Space OneView



Space OneView is a central monitoring tool that provides alarm information, operating states, infusion status information and a general overview of all beds located on a ward. The centralized OneView alarm display informs the nurses about what kind of alarm has gone off at which bed and which drug is involved. These information allow a much faster and more specific reaction to alarms and pre-alarms which reduces stress for nurses and patients.

2. Drug Library Manager



The Drug Library Manager allows the centralized preparation and distribution of care unit specific drug libraries. The new Upload Manager offers the opportunity to distribute the drug library files via the hospital network to the pumps within seconds – the pumps can remain at the bed site which avoids therapy interruption.

3. Upload Manager



The Upload Manager offers the opportunity to create and distribute upload files like drug libraries or modification data file to the infusion pumps via network or USB stick. During this procedure the pumps remain at the bed site which avoids therapy interruptions and workflow disturbances

4. DoseTrac



DoseTrac supports clinicians in analyzing IV therapy-related data. Available reports include the status of infusion pumps, number of hard limit alerts and the drug usage quantity. DoseTrac allows to establish selection criteria that the final data will be subjected to e.g. a certain time period, certain locations, certain drugs, therapies or a patient identification number.

5. Device Manager



The device manger offers a status overview of all Space devices that are connected to a hospital network. Additionally allows to create and edit device configuration files by adjusting the modification data and disposable table. These configuration files can be distributed via the hospital network by using the Upload Manager.

Description	Ref. no.
Space OnlineSuite DVD	876100
Space OnlineSuite OneView licence (1 bed, 1 year)	876103
Space OnlineSuite Drug Library Manager .WEB licence (1 bed, 1 year)	876105
Space OnlineSuite DoseTrac licence (1 bed, 1 year)	876106
Space OnlineSuite Drug Library Manager .WEB, Wi-Fi pump licence (1 year)	876105-SPW
Space OnlineSuite DoseTrac, Wi-Fi pump licence (1 year)	876106-SPW
Space OnlineSuite Device Manager (1 Hospital, unlimited)	876108

*other periods on request

B. Braun Space GlucoseControl – In touch with the future

Today's challenges

Critically ill patients develop stress-induced hyperglycemia, which is associated with adverse side effects and increases the risk of mortality and morbidity. Good news is that these risks can be minimized by intensive insulin treatment as shown in several studies.^{1,2} However, normalization of blood glucose is a big challenge increasing your workload: Being associated with an increased risk of life-threatening hypoglycemia, the procedures for blood glucose management are heterogeneous and complex, demanding most accurate control.^{3,4}

"Uncontrolled high blood glucose can lead to serious problems for hospitalized patients," ... "strategies must be identified to help hospitals establish structured protocols for safe and effective management of blood glucose in both intensive care units and other hospital settings." Recommendation of American Diabetes Association (ADA) and American Association of Clinical Endocrinologists (AACE)



B. Braun Space GlucoseControl – the solution to achieve safe and reproducible blood glucose control

B. Braun Space GlucoseControl realizes safe and reliable glucose levels in critically ill patients with a significantly reduced risk of hyper- and hypoglycemia. With its intelligent dosage algorithm, the B. Braun Space GlucoseControl integrates enteral and parenteral nutrition and exactly determines insulin rate and next sampling time helping you to easily control complex work processes for a safer future with minimized episodes of potentially dangerous hyperglycemia and hypoglycemia.

How does it work?

B. Braun GlucoseControl is integrated in the B. Braun Space System with SpaceControl. The touch screen of SpaceControl is a central graphical user interface, which is connected with the module containing the intelligent learning algorithm. The appropriate insulin rate is calculated by the intelligent algorithm integrating all important data:

User benefits

- The solution to achieve safe and reproducible blood glucose control
 - Automatic Integration of Nutrition
 - More safety in daily clinical workflow
 - Optimized workflow and simplified treatment decision for more safety in daily use
- Latest blood glucose value
 - Enteral nutrition
 - Parenteral nutrition
 - History
 - Patients' weight.

References:

1. Van den Berghe G, Wouters P, Weekers F et al. Intensive insulin therapy in critically ill patients. N Engl J Med 2001; 345:1359-67.
2. Van den Berghe G, Wilmer A, Hermans G et al. Intensive insulin therapy in the medical ICU. N.Engl.J.Med. 2006; 354: 449-61.
3. Brunkhorst FM, Engel C, Bloos F et al. Intensive insulin therapy and pentastarch resuscitation in severe sepsis. N.Engl.J.Med. 2008; 358: 125-39.
4. Preiser J-C, Devos P, Ruiz-Santana S et al. A prospective randomized multi-centre controlled trial on tight glucose control by intensive insulin therapy in adult intensive care units: the Glucontrol study. Intensive Care Med 2009; 35:1738-1748.

B. Braun Space – Ordering Data

Article	Description	Ref. no.
Perfusor® Space	Syringe pump for intravenous and intra-arterial infusions and enteral nutrition	8713030
Infusomat® Space	Volumetric pump for Infusomat® Space line. For intravenous and intra-arterial infusions and for enteral nutrition	8713050
Infusomat® Space P	Volumetric pump for standard sets. Details see Infusomat® Space	8713070
B. Braun SpaceStation	Docking station with integrated power supply to adapt up to 4 pumps. Up to 6 stations can be stacked together for a maximum capacity of 24 Space infusion pumps	8713140
B. Braun SpaceStation with integrated SpaceCom	Docking station with integrated power supply to adapt up to 4 pumps. Up to 6 stations can be stacked together for a maximum capacity of 24 Space infusion pumps with integrated power supply and SpaceCom	8713142
B. Braun SpaceCover comfort	Cover for the uppermost SpaceStation. With built-in handle and central alarm management and alarm LEDs	8713145
B. Braun SpaceCover standard	Cover with handle for the SpaceStation	8713147
SpaceStation MRI incl. trolley	MRI conditional docking station for up to four B.Braun Space infusion pumps. SpaceStation MRI shields the pumps against magnetic fields and thereby ensures interference-free images.	8713152
B. Braun Space Control	Programming unit for Space GlucoseControl (only working with art. 8713584)	8713090
SGC module	Module for Space GlucoseControl (only working with art. 8713090)	8713584
B. Braun PoleClamp SP	Universal clamp with built-in handle for transporting up to 3 pumps. Rotating assembly for vertical and horizontal mounting of pump on infusion stands and wall railing systems	8713130
Power Supply SP	Euro plug	8713110D
	UK plug	8713111D
Short Stand SP	Short infusion stand for Infusomat® Space	8713135
Battery Pack SP (NiMH)	Rechargeable battery for Infusomat®/Perfusor® Space, SpaceCover Comfort and SpaceStation	8713180
Option WiFi for SpaceCom	WiFi module for SpaceCom II	8713185U
WiFi Battery pack (Li-IoN)	Rechargeable battery for Infusomat®/Perfusor® Space with WiFi module	8713182A
Drop sensor SP	Optional drop sensor for Infusomat®Space	8713175
Connecting Lead SP (12V)	For connecting to 12V port	8713231
Combi Lead SP (12V)	For connecting up to 3 pumps (12V port)	8713133
Connecting Lead SP, Staff Call	For connecting to staff call system	8713232
fm mobile	Mobile infusion stand	8721106
PCA Kit	Kit for PCA application with Perfusor® Space	8713554
PCA lockbox	Lockbox for Perfusor® Space	8713557
Syringe Anti Removal Cap	Anti Removal Cap for PCA application (4 pcs.)	8713556

Perfusor® compact – The handy syringe pump for use on all wards

Handy, lightweight, stackable and with high performance

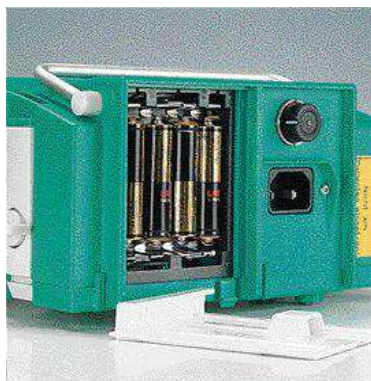


Simple and safe, both in operation and application

- 10 self-explanatory keys allow for simple parameter entries
- Simple control of important parameters via the large display, which is illuminated during mains operation
- Simple syringe exchange: using either 20 ml or 50 ml syringes, the size of which is automatically recognized
- Automatic bolus reduction, for re-starts with accurate dosage following a pressure alarm
- Excellent start-up action

Compact design, low weight and high technology

- Stackable, with a built-in locking mechanism
- Due to its high flexibility, changing tasks are simply and easily solved
- Quick and simple mounting at the bedside, via universal clamp



Battery-operable for greater mobility

- The Perfusor® compact runs for more than 3 days whilst battery operated. The inexpensive AA batteries can be exchanged directly on the wards
- Mobile performance packages – consisting of up to 3 Perfusor® compact units which lock together for safe transportation – allowing for uninterrupted continuation of infusion therapy during patient transportation

Article	Rated Voltage (plug)	Ref. no.
Perfusor® compact	110/120 V (CEE VII)	8714835
Perfusor® compact	230/240 V (CEE VII)	8714827
Perfusor® compact	230/240 V (BSI)	8714828
MFC connecting lead	For staff call	8711682
MFC connecting lead	For ambulances (12V)	8711674
MFC connecting lead	For interface use, RS-232 with electrical isolation	8711661
Rechargeable battery pack		8714991

Perfusor® compact S – The handy syringe pump for pediatrics and neonatology

Wide selection of syringes for higher flexibility
Very low infusion rates for delivery of the smallest volumes



Simple and safe both in operation and application

- With its performance profile, the Perfusor® compact S fulfils the special requirements in pediatrics and neonatology
- Infusion rates from 0.01 to 200.0 ml/h possible
- Automatic calculation of the infusion rate based on the volume and time preselection
- Either bolus administration with simultaneous display of the delivery volume or administration of preselected bolus volumes
- Reducible occlusion pressure limits for faster alarm reaction times
- Data lock function; prevents unauthorized changes to pre-selected values

Selection of syringes sizes from 2 to 50 ml meets individual requirements

- Up to 6 different syringe types can be used in the Perfusor® compact S
- Syringe size freely selectable according to the particular medication and the dose to be administered
- The advantages provided by the use of smaller syringes for pediatrics and neonatology can be optimally utilized
- Enhanced delivery characteristics at infusion rates below 1.0 ml/h
- Secure syringe fixation, fastest reaction times in the event of an occlusion
- Electronic monitoring of the syringe fixation and innovative pressure sensors ensure greater safety when syringes are exchanged and whenever a pressure alarm occurs.
- Automatic bolus reduction, for re-starts with accurate dosage following a pressure alarm



Article	Rated Voltage (plug)	Ref. no.
Perfusor® compact S	110/120 V (USA)	8714886
Perfusor® compact S	230/240 V (CEE VII)	8714843
Perfusor® compact S	230/240 V (BSI)	8714844
MFC connecting lead	For staff call	8711682
MFC connecting lead	For ambulances (12V)	8711674
MFC connecting lead	For interface use, RS-232 with electrical isolation	8711661
Rechargeable battery pack		8714991

Infusomat® fmS – The volumetric infusion pump for anesthesia and intensive care



Large display and ergonomic user interface

- The most important parameters are always visible at a single glance
 - the integrated text display with operator guidance prompts
 - provides all information for making safe entries
- The clearly structured user interface and proven 10-key input panel with a new, profiled key design provides greater "hands-on" safety and convenience

Safe and easy entry of dosage units

- Entry of concentrations in µg, mg, IU or mmol per ml-volumes:
 - body weight and time-related entries in µg/kg/min.
 - automatic calculation of the particular delivery rate in ml/h

Individual bolus dosage with pre-selectable parameters

- Bolus dosage for as long as the respective key is pressed; simultaneous display of the bolus volume delivered
- Pre-selected bolus volumes can be administered at the touch of a key
- Automatic dosage of bolus volumes at pre-selected intervals

With Original Infusomat®-Tubing for maximum consistency in delivery

- Original Infusomat®-Tubing, medical-grade silicone peristaltic tubing, is perfectly matched to both the pump and its integrated safety system. As a result, this tubing ensures high delivery accuracy and consistency and, most important, trouble-free functioning over long periods of time

Article	Software/Language (plug)	Rated Voltage	Ref. no.
Infusomat® fmS	English (USA)	100/120 V	8715416
Infusomat® fmS	English (CEE VII)	230 V	8715548
Infusomat® fmS	English (BSI)	200/240 V	8715440
Infusion tripod, short	With drip-chamber holder		8701644
MFC connecting lead	For staff call		8711682
MFC connecting lead	For ambulances (12 V)		8711674
MRC connecting lead	For potential equalisation		8701628
MRC connecting lead	For interface use, RS-232 with electrical isolation		8711661

Infusomat® P – The volumetric infusion pump for use with Intrafix® IV administration sets



Compatible with I.V. administration sets made of PVC

- The compatibility of all Intrafix® Air P and Intrafix® Primeline Classic/Comfort I.V. administration sets with the Infusomat® P allows trouble-free use of this volumetric infusion pump even in peripheral wards

High operation convenience for safe procedures

- The large display and ergonomic design of the user interface with our proven 10-key input panel makes it easy to enter parameters

The safety system for less stress during monitoring

- A flow clamp prevents "free flow" when the pump door is opened
- The air detector minimizes the risk of air infusion
- Adjustable pressure limits result in a reduction of the bolus volume and a shorter alarm reaction time in the event of system occlusion

Accomplish different tasks easily at one touch of a key

- Direct entry or automatic calculation of the delivery rate as a result following entry of both volume and time. The rate can be adjusted, if necessary, without stopping the infusion
- Individual bolus administration by pre-selectable parameters
- Administration of dosage units according to body weight and/or time. Easy input of parameters; automatic calculation of the delivery rate

Modular system options

- The Infusomat® P offers extensive options for adoption to future requirements
 - Installation of modules with expanded system capabilities (memory cards) eliminates the need for special devices (e.g. history module for time-related documentation of up to 400 actions)

Article	Software/Language (plug)	Rated Voltage	Ref. no.
Infusomat® P	English (USA)	100/120 V	8712387
Infusomat® P	English (CEE VII)	230 V	8712379
Infusomat® P	English (BSI)	200/240 V	8712212
Infusion tripod, short	With drip-chamber holder		8701644
MFC connecting lead	For staff call		8711682
MFC connecting lead	For ambulances (12 V)		8711674
MRC connecting lead	For potential equalisation		8701628
MRC connecting lead	For interface use, RS-232 with electrical isolation		8711661

Original Perfusor®-Syringes – For use with Perfusor® syringe pumps



- With outstanding plunger-slide characteristics
Original Perfusor®-Syringes complement the excellent delivery performance of Perfusor®-Syringe pumps. Accurate start-up delivery and delivery consistency are ensured
- Barrel and plunger material made of polypropylene
- Smooth-sliding plunger gasket with double seal, natural latex-free, made of synthetic material, qualified according to ISO 10 993 resp. DIN EN 30 993 (biological evaluation of medical devices)
- Minimal residual volume
- Excellent readability
- Permanent graduation
- Lock fitting

Original accessories – for system safety

Article	Description	Size	Sales Unit/ pcs.	Ref. no.	Latex free	PVC free
Original Perfusor®-Syringe	With aspiration needle	50 ml	100	8728810F	●	●
Original Perfusor®-Syringe	W/o aspiration needle	50 ml	100	8728844F	●	●
Original Perfusor®-Syringe	With aspiration needle and integrated particle filter, 15 µm	50 ml	100	8728852F	●	●
Original Perfusor®-Syringe	Transparent yellow, with aspiration needle, 2.0 x 30mm	50ml	100	8728801F	●	●
Original Perfusor®-Syringe	With needle, UV-protect, orange	50ml	100	8728861F-06	●	●
Original Perfusor®-Syringe	With aspiration needle	20 ml	100	8728623	●	●
Original Perfusor®-Syringe	W/o aspiration needle	20 ml	100	8728615	●	●
Aspiration Needle	W/o particle filter		100	8258813	●	●
Aspiration Needle	With particle filter		100	8258821	●	●

Original Perfusor®-Tubings – For use with syringe pumps



- Made of PVC or PE
- Minimized priming volumes
- Luer-Lock fitting
- DEHP-free

Original accessories – for system safety

Article	Priming Volume	Inner Ø (mm)	Length cm	Sales Unit/ pcs.	Ref. no.	Latex free	PVC free
Original Perfusor®-Tubing	0.88	1.5	50	100	8255172	●	–
Original Perfusor®-Tubing	2.65	1.5	150	100	8722960	●	–
Original Perfusor®-Tubing	3.53	1.5	200	100	8722862	●	–
Original Perfusor®-Tubing	4.41	1.5	250	100	8255490	●	–
Original Perfusor®-Tubing	5.3	1.5	300	100	8255253	●	–
Original Perfusor®-Tubing with Safsite®	2.65	1.5	150	100	8722820	●	–
Original Perfusor®-Tubing 0.2 µm disc-filter	3.53	1.5	200	100	8723001	●	–
Original Perfusor®-Tubing PCA	2.94	1.5	150	50	8726019	●	–
Original Perfusor®-Tubing	0.5	0.9	75	100	8722870N	●	–
Original Perfusor®-Tubing	1.0	0.9	150	100	8255504N	●	–
Original Perfusor®-Tubing	1.3	0.9	200	100	874591N	●	–
Original Perfusor®-Tubing	0.39	1.0	50	100	8255059	●	●
Original Perfusor®-Tubing	0.79	1.0	100	100	8255067	●	●
Original Perfusor®-Tubing	1.18	1.0	150	100	8722935	●	●
Original Perfusor®-Tubing	1.57	1.0	200	100	8723060	●	●
Original Perfusor®-Tubing	1.96	1.0	250	100	8272565	●	●
Original Perfusor®-Tubing, orange	1.18	1.0	150	100	8723017	●	●
Original Perfusor®-Tubing, yellow	1.57	1.0	200	100	4185838	●	●
Original Perfusor®-Tubing with slide clamp	1.0	0.9	150	100	8722940	●	–
Original Perfusor®-Tubing with slide clamp	1.3	0.9	200	100	8722941	●	–

Infusomat® Space Lines – For use with Infusomat® Space & Infusomat® fmS



- Sharp, piercing spike
- Bacteria-proof venting with Euro-cap
- Upper drip-chamber segment ideal for attachment of an infusion pump drip sensor
- 15 µm fluid filter
- Roller clamp with piercing-spike covering for safe disposal
- Silicone pump segment
- DEHP-free

Description	Length (cm)	Sales Unit	Ref. no.	Latex free	PVC free
Type "Standard" with injection port for needle access	270	100	8700087SP	●	-
Type "Standard"	300	100	8270350SP	●	-
Type "Standard" with Safeflow needle-free injection port	270	50	8700110SP	●	●
Type „SafeSet“, standard	250	100	8701148SP	●	-
Type „SafeSet“, Neutrapur	250	100	8701149SP	●	●
Type „SafeSet“, with Safeflow needle-free injection port	300	100	8700118SP	●	●
Type "UV-protected" with Safeflow, orange	250	100	8250437SP	●	●
Type "UV-protected", orange	250	100	8700127SP	●	●
Type "Enteral Nutrition Safety" w. Enterofix 1000 ml; PVC	230	25	8250836SP	●	-
Type "Enteral Nutrition Safety" w. Multi connector; PUR	320	40	8250856SP	●	●
Type "Eqidural", Yellow, ProSet	300	100	8700131SP	●	●
Type "Cyto-Set" with 3 needle-free valves	210	20	8250917SP	●	●
Type "Cyto-Set" with 5 needle-free valves	210	20	8250817SP	●	●
Type "Cyto-Set" with 5 needle-free valves and 0.2 µm filter	210	20	8250414SP	●	●
Type "Cyto-Set Mix" with 1 needle-free valve, orange	32	20	A2900N	●	●
Type "Cyto-Set Mix" with 1 needle-free valve and 0.2 µm filter	32	20	A2903N	●	●
Type "Cyto-Set" Mix" with 1 needle-free valve, orange	32	20	A2906N	●	●
Type "Cyto-Set" Line 0.2 µm filter, orange	32	20	A2582NF	●	●
Type "Cyto-Set" Line	32	20	A2581NF	●	●
Type "Piggybacking" with 2 Safeflow needle free injection ports	300	100	8250710SP	●	●
Secondary line for 8250710SP	75	20	4062877	●	●
Type "Transfusion" with 200 µm blood filter	250	100	8270066SP	●	-
Type "Transfusion" with injection port	250	100	8270074SP	●	-
Type "Y-Transfusion"	250	50	4181557SP	●	-
Type "Neutrapur"	250	100	8250731SP	●	●
Type "Neutrapur" with 0.2 µm filter	250	20	8700095SP	●	●
Type "Dosifix®" with Safeflow needle-free injection ports	270	25	8250245SP	●	●
Type "Dosifix®" with SafeSet UV-protected, orange	250	25	8700128P	●	●

Braunostat® – Infusion stands



Braunostat® U

- Universal infusion stand for mounting of up to three infusion pumps
- Adjustable holder (1260 – 2200 mm) for 4 infusion containers
- Drop catcher
- Foot base with five rollers (two rollers lockable)
- Max. load 40 kg

Braunostat® B

- Bed infusion stand for mounting of up to three syringe pumps or one volumetric infusion pump
- Adjustable holder for four infusion containers
- Drop catcher
- Further configurations on request

Basic infusion stand

- IV stand for mounting of one infusion pump

Article	Ref. no.
Braunostat® U	8727902
Braunostat® B	8727708
Basic infusion stand	G101

		Page
Parenteral Nutrition	Nutriflex®	Two-chamber bags 105
	NuTRIflex® Lipid peri	Three-chamber bags 106
	NuTRIflex® Lipid plus & NuTRIflex® Lipid special	Three-chamber bags 107
	Aminoplasma® B.Braun / Aminoplasma® Hepa	Amino acids solutions 108
	Aminoplasma® Paed 10 %	Amino acids solutions 109
	Lipofundin® MCT/LCT 10% Lipofundin® MCT/LCT 20%	Modern lipid emulsion 110
	Lipoplus® 20 %	The new lipid emulsion with fish oil 111
	Tracutit® / Glucose B. Braun	Trace elements 112
	Nutrimix® / Nutrimix® Barrier / Nutrimix® DC	Compounding bags 113
Enteral Nutrition	Enteral Nutrition Safety System	Gravity and Space pumps Safety Sets 114
	Omnifix® Enteral	3-piece syringe 115
	Enteral Straws with ENFit™ / Enteral Syringe Cap with ENFit™ / EnteroFix® 1000	Accessories / Enteral Fluid Bag 116
	Nutrifix® Safety Sets	Gravity administration sets 117
	Enteroport® plus Safety Sets	Sets for enteral feeding pump
	Nutricomp®	Tube feeding diets 118
	Enteroport® plus	Enteral nutrition pump 120
	Nutrifix® Sets, Enteroport® 1000	Pump and gravity administration systems 121
	Nutritub®	Soft polyurethane nasogastric and naso-intestinal enteral feeding tubes 122
	Original Perfusor® Line Type Enteral Nutrition ENFit™	Application Set 123

Nutriflex® – Sterile solution for intravenous nutrition containing amino acids, carbohydrates and electrolytes in a two-chamber bag



Characteristics

- Different balanced regimens for peripheral and central venous application
- Reliable source of protein and calories
- Covers electrolyte needs
- Easy and safe handling
- Flexibility to add fat easily to complete parenteral nutrition from one bag
- 24-month shelf life at room temperature
- Presentation: Sales Unit/ pcs. 5 per box

Accessories

- Nutriflex® Transfer Set (Ref. No. 2129043)
- Light Protection Cover:
 - Nutriflex® 625–1000 ml (Ref. No. 2129035)
 - Nutriflex® 1500–2500 ml, 2000 ml (Ref. No. 2112112)

Product range

- Wide range of Nutriflex® versions and volumes enables patient-adapted nutrition
- High flexibility in adding fat or in combination with Propofol-®Lipuro
- Adjustment of the PN regimens to the amount of fat given for sedation, e.g. with Propofol-®Lipuro

Nutriflex® peri

- Peripheral parenteral nutrition with the flexibility in adding fat
- Supplemented nutrition or in combination with enteral feeding
- For Low Glucose Nutrition (LGN) Therapy

Nutriflex® plus

- Parenteral nutrition in situations with moderately increased requirements
- For central venous access

Nutriflex® special

- Volume-restricted parenteral nutrition for ICU patients
- In situations with high nutritional requirements
- For central venous access

Nutriflex® basal

- Parenteral nutrition in situations with basal nutrition requirements
- For central venous access

Composition		Nutriflex® peri		Nutriflex® plus		Nutriflex® special	
Volume (ml)		1000	2000	1000	2000	1000	1500
Amino Acids	g	40	80	48	96	70	105
Nitrogen	g	5.7	11.4	7	14	10	15
Glucose	g	80	160	150	300	240	360
Total energy	kcal	480	960	790	1580	1240	1860
Osmolarity	mOsm/l	900	900	1400	1400	2100	2100

NuTRIflex® Lipid peri – Sterile solution for IV nutrition containing amino acids, carbohydrates and lipids in a three-chamber bag



NuTRIflex® Lipid peri

- Peripheral parenteral nutrition
- Low osmolarity (840 mOsm/l) allows application via peripheral venous access
- Supplementary nutrition in combination with enteral nutrition
- Specially designed for Low Glucose Nutrition (LGN) Therapy (peripheral and central venous)
- Contains electrolytes and zinc

Product range

- Easy and safe parenteral nutrition
- Metabolic advantages by simultaneous administration of all nutrients with one infusion
- The only 3-chamber bag with Lipofundin® MCT/LCT – the state of the art lipid emulsion
- Reduces work load and total cost for TPN
- Approved for children over 2 years

Characteristics

- Different balanced regimens for peripheral and central venous application suitable for at least 80% of the patients requiring TPN
- Allows the simultaneous administration of required nutrients out of one container
- Contains MCT/LCT lipid emulsion
- Electrolyte-containing versions cover the basic needs for electrolytes and zinc
- Electrolyte-free versions for individualized electrolyte administration
- Easy and safe handling
- 24-months shelf life at room temperature
- After mixing of compartments chemical stable for 7 days at 2-8° C, plus 48 hours at 25° C

Accessories

- Light Protection Cover suitable for all sizes of NuTRIflex® Lipid peri available

Composition 1250 ml		NuTRIflex® Lipid peri with electrolytes		
Volume (ml)		1250	1875	2500
Amino Acids	g	40	60	80
Nitrogen	g	5.7	8.6	11.4
Glucose	g	80	120	160
Lipids	g	50	75	100
Total energy	kcal	955	1435	1910
Osmolarity	(mOsm/l)	840	840	840

Product availability and article numbers can vary between countries. Please contact the local B.Braun representative.

NuTRIflex® Lipid plus & special – Sterile solution for IV nutrition containing amino acids, carbohydrates and lipids in a three-chamber bag



NuTRIflex® Lipid plus

- Central venous parenteral nutrition for moderately increased requirements
- Easy to calculate: 1 ml = 1 kcal
- Available with electrolytes

NuTRIflex® Lipid special

- If volume-restricted parenteral nutrition is required
- In situations with high nutritional demands
- As 625 ml version: ICU starter bag and for combined enteral/parenteral nutrition
- Available with and without electrolytes

Product range

- Easy and safe parenteral nutrition
- Metabolic advantages by simultaneous administration of all nutrients with one infusion
- The only 3-chamber bag with Lipofundin® MCT/LCT – the state of the art lipid emulsion
- Reduces work load and total cost for TPN
- Approved for children over 2 years

Characteristics

- Different balanced regimens for peripheral and central venous application suitable for at least 80% of the patients requiring TPN
- Allows the simultaneous administration of required nutrients out of one container
- Contains MCT/LCT lipid emulsion
- Electrolyte-containing versions cover the basic needs for electrolytes and zinc
- Electrolyte-free versions for individualized electrolyte administration
- Easy and safe handling
- 24-months shelf life at room temperature
- After mixing of compartments chemical stable for 7 days at 2–8° C, plus 48 hours at 25° C

Accessories

- Light Protection Cover suitable for all sizes of NuTRIflex® Lipid available

Composition 1250 ml	NuTRIflex® Lipid plus	NuTRIflex® Lipid special without electrolytes	NuTRIflex® Lipid special with electrolytes
Electrolytes	+	–	+
Amino Acids g	48	70.1	70.1
Nitrogen g	6.8	10	10
Glucose g	150	180	180
Lipids g	50	50	50
Total energy kcal	1265	1475	1475
Osmolarity (mOsm/l)	1075	1195	1195
Presentations (ml)	1250, 1875, 2500	1250, 1875, 2500	675, 1250, 1875, 2500

Aminoplasma[®] B.Braun – 5% or 10% amino acid solution for parenteral nutrition



- Balanced supply of essential and non-essential amino acids
- Rapid improvement of nitrogen balance
- Excellent stability in TPN mixtures

Characteristics

- Provides essential and non-essential amino acids
- High content in branched chain amino acids
- 5% and 10% amino acid concentrations
- With and without electrolytes

Aminoplasma[®] – 15% amino acid solution for parenteral nutrition



Characteristics

- Provides essential and non-essential amino acids
- High content in branched chain amino acids
- 15% amino acid concentrations

Aminoplasma[®] Hepa 10 % – Amino acid solution for parenteral nutrition for patients with severe liver diseases and treatment of hepatic encephalopathy



- Normalization of cirrhose-induced amino acid imbalances
- Improved clinical situation in hepatic encephalopathy
- Provides adequate protein supply without endangering patients suffering from liver insufficiency

Characteristics

- Specific amino acid pattern adapted to the specific needs of patients with liver insufficiency
- High concentration of branched chain amino acids
- Reduced aromatic amino acid and methionine content

Composition 1000 ml	Aminoplasma [®] B.Braun				Aminoplasma [®]	
	5 %	5 % E	10 %	10 %E	15 %	Hepa
Amino Acids g	50	50	100	100	150	100
Nitrogen g	7.9	7.9	15.8	15.8	24	15.3
Electrolytes	–	+	–	+	–	–
Total energy kcal	200	200	400	400	600	400
Presentations	500 ml, 1000 ml – Sales Unit: 10 glass bottles per box					

Aminoplasma Paed 10% – Amino acid solution for parenteral nutrition of paediatric patients including new borns, infants and small children

Characteristics

- The composition of amino acids in Aminoplasma[®] Paed 1 % is adapted to special requirements of pediatric patients
- Aminoplasma[®] Paed 10 % contains sufficient amounts of all necessary amino acids including taurine
- Compared to other available pediatric AA solutions Aminoplasma[®] Paed 10% contains more:
 - Lysine for support the growth and urea synthesis as well as to increase the brain DNA concentration¹
 - Arginine to prevent hyperammonemia²
- To prevent development of amino acid imbalances Aminoplasma[®] Paed 10 % contains less methionine, phenylalanine and glycine as the key enzymes for the degradation of these amino acids are immature.^{3,4}



User benefits

- 2 sterile ports – lower risk of microbiological contamination
- Low risk of micro cracks
- Flexible, lightweight bag for easy storage and handling
- Free of latex, PVC and DEHP
- No risk of breakage

Composition 250 ml	Aminoplasma [®] Paed 10 %
Amino Acids g	25
Nitrogen g	3.8
Electrolytes	–
Total energy kcal	100
Osmolarity g	97

Product availability and article numbers can vary between countries. Please contact the local B.Braun representative.

1) Tews JK, Bradford AM, Harper AE. Induction of lysine imbalance in rats: relationships between tissue amino acids and diet. J Nutr. 1981; 111(6):968-78

2) Batshaw ML, Wachtel RC, Thomas GH, Starrett A, Brusilow SW. Arginine- responsive asymptomatic hyperammonemia in the premature infant. J Pediatr. 1984; 105(1):86-91

3,4) Koletzko B, Goulet O, Hunt J, Krohn K, Shamir R. Parenteral Nutrition Guide-lines Working Group; European Society for Clinical Nutrition and Metabolism; European Society of Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN); European Society of Paediatric Research (ESPR). 1. Guidelines on Paediatric Parenteral Nutrition of the European Society of Paediatric Gastro-enterology, Hepatology and Nutrition (ESPGHAN) and the European Society for Clinical Nutrition and Metabolism (ESPEN), Supported by the European Society of Paediatric Research (ESPR). J Pediatr Gastroenterol Nutr 2005 Nov; 41 Suppl 2:S1-87/ Fusch C, Bauer K, Böhlles HJ, Jochum F, Koletzko B, Krawinkel M, Krohn K, Mühlebach S; Working group for developing the guidelines for parenteral nutrition of The German Society for Nutritional Medicine. Neonatology/Paediatrics – Guidelines on Parenteral Nutrition, Chapter 13. Ger Med Sci. 2009 Nov 18; 7:Doc15

Lipofundin® MCT/LCT – Modern fat emulsion for parenteral nutrition on the basis of medium and long chain triglycerides



- Protects liver, lung and immune function
- Improves protein economy
- Superior stability improves safety
- One lipid emulsion for all patients
- Antioxidative protection to prevent peroxidative damages

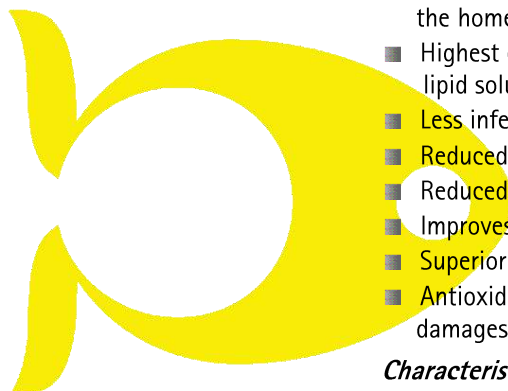
Characteristics

- The only MCT containing lipid emulsion registered for use in neonates and children
- For peripheral and central venous application
- Superior stability in TPN admixtures
- Supplemented with vitamin E

Composition 1000 ml		Lipofundin® MCT/LCT 10 %	Lipofundin® MCT/LCT 20 %
Soybean oil (LCT)	g	50	100
MCT oil (coconut)	g	50	100
α-Tocopherol (Vitamin E)	mg	85	170
Total energy	kcal	1022	1908
Presentations	100, 250, 500 ml – Sales Unit: 10 glass bottles per box		

Product availability and article numbers can vary between countries. Please contact the local B.Braun representative.

Lipoplus® / Lipidem® 20 % – The new generation of lipid emulsions based on medium and long chain triglycerides (MCT and LCT) and fish oil based triglycerides



- A well-balanced $\omega 3 : \omega 6$ fatty acid intake leads to the homeostasis of inflammatory processes in the body
- Highest content of EPA and DHA among all fish oil- based lipid solutions (Eu.Pharmacopeia xxxx)
- Less infections
- Reduced organ complications
- Reduced length of stay in hospital
- Improves protein economy
- Superior stability improves safety
- Antioxidative protection to prevent peroxidative damages

Characteristics

- For peripheral and central venous application
- Superior stability in TPN admixtures
- Supplemented with vitamin E

Composition 1000 ml		Lipidem®
Soybean oil (LCT)	g	80
MCT oil (coconut)	g	100
Fish oil	g	20
α -Tocopherol (Vitamin E)	mg	170
Total energy	kcal	1910
Presentations	ml	100, 250, 500 – Sales Unit: 10 glass bottles per box

Tracutal® – Trace element additive for adults



User benefits

- Supply of trace elements in Parenteral Nutrition of adults
- Compatible with a wide range of nutritional admixtures

Characteristics

- Balanced mixture of the 9 trace elements Iron, Zinc, Manganese, Copper, Chromium, Molybdenum, Selenium, Fluoride and Iodide
- Meets the daily requirements of essential trace elements

Presentations	Reference no.	Container	Label language	Sales Unit/ pcs.
Tracutal® GA 10 ml ENG	630972	10 ml glass ampoule	English	5

Glucose B. Braun – Glucose solution for providing energy in Parenteral Nutrition



User benefits

- Essential energy source for organs and tissues

Characteristics

- Basic component in Parenteral Nutrition
- Delivers approx. 4 kcal/g glucose
- Wide range of concentrations available

Composition 1000 ml	Glucose					
	10 %	20 %	30 %	40 %	50 %	70 %
Glucose (g)	100	200	300	400	500	700
Energy (kcal)	400	800	1200	1600	2000	2800
Presentations	Ecoflac® plus 500 ml; glass bottle 500 ml/1000 ml					

Nutrimix®

Traditional EVA mixing bag for easy and safe handling



- 100 % Latex-free and DEHP-free, specially suitable for fat-containing TPN regimes
- Additive injection port closure cap
- Detachable transfer set with lock connector
- Sterile outlet port with snap-off cap
- Easy and safe handling

Nutrimix® Barrier

Mixing Bag made of Multi-Layer Film to protect individual TPN preparations from oxidation.



- 100 % Latex-free and DEHP-free, specially suitable for fat-containing TPN regimes
- Prolongs the stability of oxygen-sensitive compounds (e.g. vitamins)
- Ensures longer shelf life of compounded regimes
- Sterile outlet port with snap-off cap ensures easy and safe handling

Nutrimix® DC

Dual chamber bag for stable separate storage of individual TPN preparation.



- 100 % Latex-free and DEHP-free, specially suitable for fat-containing TPN regimes
- Dual chamber allows preparation with separate storage e.g. of amino acid-glucose mixture separate from lipid emulsion and therefore longer storage of compounded lipid-containing TPN formulations
- High-flow filling port
- Sterile outlet port with snap-off cap ensures easy and safe handling

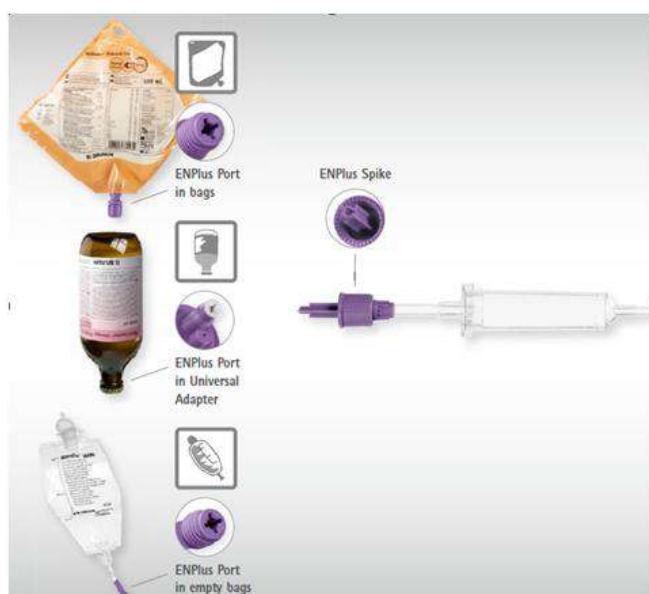
Presentations	Volume	Filling lines	Unit/Pck.	Pck./Carton	Ref. No.
Nutrimix® 0.2/0	200 ml	0	1	25	2112145
Nutrimix® 0.5/0	500 ml	0	1	25	2112146
Nutrimix® 1/0	1000 ml	0	1	25	2112147
Nutrimix® 2/3	2000 ml	3	1	25	2112150
Nutrimix® 3/3	3000 ml	3	1	25	2112151
Nutrimix® Barrier 3/0	3000 ml	0	5	25	2112444
Nutrimix® Barrier 2/0	2000 ml	0	5	25	2112443
Nutrimix® Barrier 1/0	1000 ml	0	5	40	2112442
Nutrimix® Barrier 0.5/0	500 ml	0	5	50	2112441
Nutrimix® Barrier 0.2/0	200 ml	0	5	50	2112440
Nutrimix® Dual Chamber Bags (2500 + 500 ml)	3000 ml	0	1	25	2112446
Nutrimix® Dual Chamber Bags (1250 + 250 ml)	1500 ml	0	1	25	2112445
Transfer Set	0	4	.1	25	2112449

Enteral Nutrition Safety System

As a leader in Safe Infusion Therapy B. Braun is dedicated to making the administration of enteral and parenteral nutrition safer. Reported cases of enteral misconnections (see Simmons, Symes, Guenter, Graves: Tubing misconnections: normalization of deviance. Nutr Clin Pract 2011 26(3): 286-293) have resulted in severe and sometimes fatal consequences for patients.

B. Braun understands your requirements for safe administration of clinical nutrition. Our new Safety System eliminates confusion between Enteral and IV routes and is comprised of:










- dedicated enteral syringes called Omnifix® Enteral and Exadoral®
- violet colored EN Plus Spike or Port to connect the enteral infusion line to the respective containers



User benefits

- Dedicated enteral connectors eliminate the possibility of mixing up parenteral with enteral access ports
- Purple color coded for faster identification
- One system for all major application ways and diet containers

- violet colored Inverse Safety Y-port inside enteral infusion lines or Perfusor extension lines (see next page)
- violet colored male ENLock proximal of enteral infusion lines or Perfusor extension lines (see next page)
- violet colored female ENLock at hub of enteral feeding line (see next page)

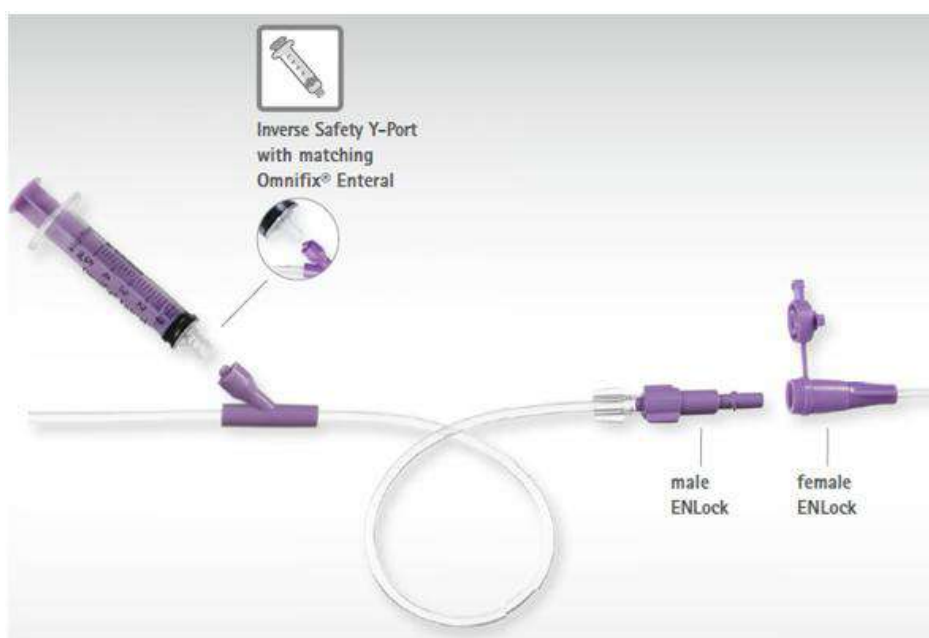
Administration way	Administration set with empty bag		Administration set with Universal Adapter	
Gravity				Nutrifix® Universal Adapter Safety Ref. no. 9240622
Enteroport® Plus				Enteroport® Plus Set Universal Adapter Safety Ref. no. 8721745
Space pumps				Infusomat® Space Line Universal Adapter Ref. no. 8250856SP

Omnifix® Enteral – Syringe for bolus application of drugs or enteral nutrition into enteral feeding line



Characteristics

- 3-piece syringe with violet colored plunger
- Nozzle for connection with inverse Y-port of Safety portfolio
- Precise graduation
- Tear resistant printing on the barrel



Volume	Sales Unit/ pcs	Ref. no.
1 ml	200	4616024-01
2.5 ml	200	4616025-01
5 ml	200	4616026-01
10 ml	200	4616027-01
20 ml	100	4616028-01
50 / 60 ml	100	4616029-01

Enteral Straws / Enteral Syringe Cap / Enterofix® 1000

Enteral Nutrition

Enteral Straws with ENFit™



Characteristics

- Suitable for enteral syringes with ENFit™ connector
- Easy withdrawal of oral medication and enteral nutrition

Length in cm	Sales Unit/ pcs	Ref. no.
10	100	4616009
17	100	4616013

Enteral Syringe Cap with ENFit™



Characteristics

- Seals enteral syringes with ENFit™ connector
- For easier storage and transportation of syringes
- Avoids leakage and wasting

Sales Unit/ pcs	Ref. no.
300	4616020

Enterofix® 1000



Characteristics

- 1000 ml storage/empty bag for fluid application
- To be used in connection with all application sets with a Multispike
- Easy to fill
- Graduated scale and label for patient data
- DEHP-free

Sales Unit/ pcs	Ref. no.
30	9240799

Nutrifix® Safety Sets – Gravity administration sets



Nutrifix® Safety, 1000 ml bag



Nutrifix® Safety, Universal Adapter

Characteristics

- Administration with storage bag, 1000 ml
- Administration with Universal adapter for bags, wideneck and crown cork closed bottles

Presentations	Ref. no.
Nutrifix® Safety, 1000 ml bag	9240678
Nutrifix® Safety, Universal Adapter	9240622

Enteroport® plus Safety Sets – Sets for enteral feeding pump "Enteroport® plus"



Enteroport® Plus Safety Set
1000 ml bag



Enteroport® Plus Safety Set
Universal Adapter

Characteristics

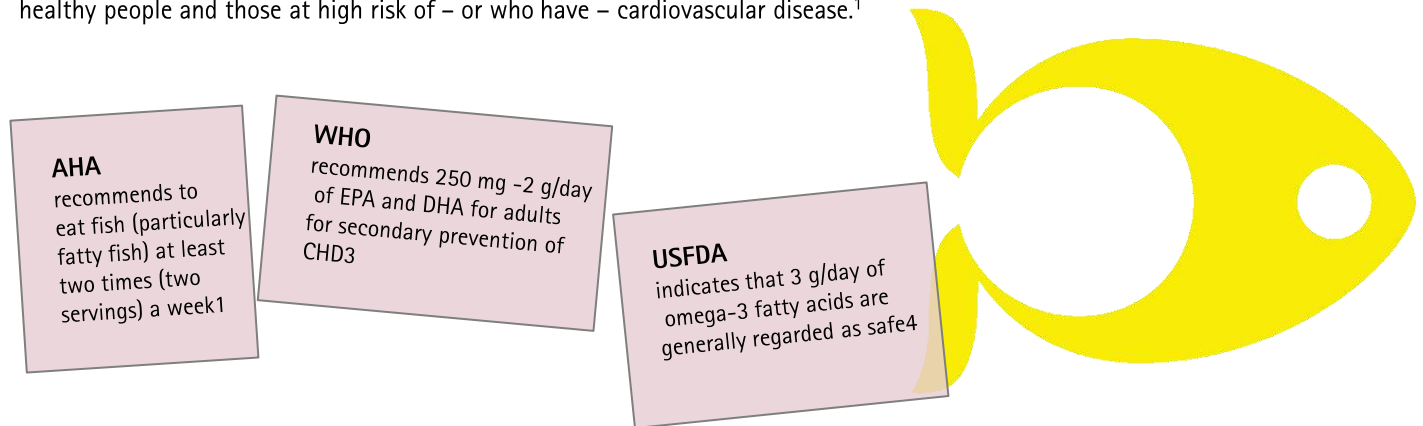
- Administration with storage bag, 1000 ml
- Administration with Universal adapter for bags, wideneck and crown cork closed bottles
- Special pump segment for Enteroport® plus pump

Presentations	Ref. no.
Enteroport® Plus Safety Set, 1000 ml bag	8721735
Enteroport® Plus Safety Set, Universal Adapter	8721745

Nutricomp® Drink – B. Braun's oral nutritional supplement portfolio

B. Braun's enteral nutrition products (Nutricomp®) offer the greater benefits of higher fish oil content and are **compliant** with international guidelines, **compatible** with good metabolism and offer a **complete** portfolio of diet feeds and administration devices.

Various health organizations worldwide have made dietary recommendations for fish intake, particular in regards to two kinds of omega-3 fatty acids: eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). Omega-3 fatty acids benefit the heart of healthy people and those at high risk of – or who have – cardiovascular disease.¹



Nutricomp® is **compliant** with international guidelines










1. American Heart Association: AHA recommendation. Accessed through the internet: http://www.heart.org/HEARTORG/GettingHealthy/NutritionCenter/Fish-101_UCM_305986_Article.jsp (accessed 2011-08-11)
2. Joint FAO/WHO Expert Consultation on Fats and Fatty Acids in Human Nutrition, WHO, Geneva, November 2008. FAO Food and Nutrition paper 91, Chapter 2, table 2.1: Recommended dietary intakes for total fat and fatty acid intake: Adults, page 11.
3. "FDA announces qualified health claims for omega-3 fatty acids" (Press release). United States Food and Drug Administration. September 8, 2004. <http://www.fda.gov/SiteIndex/ucm108351.htm>. (accessed 2011-11-11)
4. EFSA Journal 2010; 8(10): 1796 [32 pp.].

Nutricomp® Drink – B. Braun's oral nutritional supplement portfolio



User benefits

- The Nutricomp® Drink range (except fruity flavor) are nutritionally complete formulas containing essential nutrients, vitamins and minerals. They can be used as supplementary or complete nutrition.
- Suitable for oral or tube feeding as the bottle connects to a wide neck adaptor of any giving set
- New bottle design provides an excellent grip, easy opening and peeling off peel seam
- Nutricomp® Drink is best served chilled or can be heated shortly in the microwave (max. 60° C); for a warm serving (espec. Nutricomp® Soup).
- Nutricomp® is gluten-free and low in lactose

Product	Composition (200 ml)					Flavors	
	Energy kcal/ml Kcal/bottle	Protein g/100 ml % Energy	Fat g/100 ml % Energy	Carbohydrate g/100 ml % Energy	Fiber g/100 ml % Energy		
Standard Diets							
Nutricomp® Drink Plus	1.5 kcal/ml 300 kcal	6 g 16%	5 g 30 %	20 g 54 %	< 0.1 g 0 %	neutral, vanilla, banana, straw- berry, chocholate	
Nutricomp® Drink Plus Fibre	1.56 kcal/ml 312 kcal	6.4 g 16%	5 g 29 %	20 g 53 %	2 g 3 %	neutral, vanilla, peach-apricot, chocholate, coffee	
Nutricomp® Drink Soup	1.5 kcal/ml 300 kcal	6 g 16 %	5 g 30 %	18.8 g 51 %	1.5 g 3 %	vegetable, mild chicken-curry	
Nutricomp® Drink Plus HP	1.5 kcal/ml 300 kcal	10 g 27 %	5.5 g 33 %	14.3 g 40 %	-	neutral, vanilla, red fruits, chocolate- nougat	
Nutricomp® Drink 2.0 kcal Fibre	2 kcal/ml 400 kcal	9 g 18 %	8.7 g 36 %	21.4 g 43 %	2.5 g 3 %	neutral, cherry, chocolate, caramell-toffee	
Nutricomp® Drink Standard Fibre	1.04 kcal/ml 208 kcal	3.8 g 15 %	3.3 g 29 %	13.8 g 53 %	1.5 g 3 %	neutral, vanilla, banana, straw- berry, nut	
Speciality Diets							
Nutricomp® Drink D	1 kcal/ml 200 kcal	4.1 g 16 %	3.5 g 31.5 %	12.3 g 48 %	2.1 g 4 %	neutral, vanilla	
Nutricomp® Drink Renal	2 kcal/ml 400 kcal	7 g 14 %	9.6 g 44 %	20.6 g 40 %	1.7 g 2 %	neutral, vanilla	
Nutricomp® Drink Hepa	1.32 kcal/ml 264 kcal	4 g 12 %	5.8 g 40 %	15.5 g 47 %	0.56 g 1 %	chocolate	

Enteroport® plus – Safe Application of Enteral Nutrition



Enteroport® plus:

- Pump technology: swash plate
- Dimensions (W x H x D): 14 x 4.5 x 11.5 cm
- Weight: 450 g
- Battery life: 35 h at 200 ml/h
- Recharging time: 3.5 h
- Feeding program: continuous/interval/bolus feeding
- Application rate: 1 – 400 ml/h, increments of 1 ml/h
- Total volume: 1 – 5000 ml/h, increments of 1 ml/h (1–49 ml) and 50 ml/h (50–5000 ml)
- Flow time: 15 min – 24 h, variable at 15 min intervals
- Flow rate accuracy: +/- 10 %
- Water protection: IP 22
- Occlusion detect. pressure: < 150 kPa (1,5 bar)
- Air detection: > 10 ml
- Operating temperature: + 5°C... + 40°C

Enteroport® plus	Ref. no.
Enteroport® plus Pump	8710355
Enteroport® plus Accessories	Ref. no.
Power supply:	
Euro plug	8710360
UK plug	8710361
US plug	8710362
Brazil plug	8710363
Pole clamp	8721061
Staff Call	8721548
Support stand	8721670

User benefits

- Suitable for hospital and home care
- Small, lightweight design
- Customisable settings
- Continuous, interval, and bolus feeding programs
- Easy loading of pump cassette
- Quiet pump operation

Application Set:

- DEHP-free and steril
- Drip chamber and roller clamp

Enteroport® plus Application Sets	Ref. no.
Basic Application Set	
Enteroport® plus Set 500 ml	8721726
Enteroport® plus Set 1000 ml	8721734
Enteroport® plus Set 2500 ml	8721742
Enteroport® plus Set FL	8721688
Enteroport® plus Set Multispike	8721750
Enteroport® plus Set Universal Adapter	8721744
Safety Application Sets	
Enteroport® plus Set 1000 ml Safety	8721735
Enteroport® plus Set Universal Adapter Safety	8721745
Transition Application Sets	
Enteroport® plus Set 1000 ml ENFit™	8721736
Enteroport® plus Set Universal Adapter ENPlus/ENFit™	8721746
Enteroport® plus Set ENPlus/ENFit™	8721748
Final Application Sets – New ISO Standard	
Enteroport® plus Set 1000 ml ENFit™	8721737
Enteroport® plus Set Universal Adapter ENPlus/ENFit™	8721747
Enteroport® plus Set ENPlus/ENFit™	8721749

Nutrifix® Sets – Gravity Administration sets

Nutrifix® 1000 ml – HF



Nutrifix® FL – HF

Nutrifix® Multispike – HF

- Meets international EN Safety recommendations
- Gravity administration sets

Characteristics:

- Administration with storage bag (1.000, 2.500 ml)
- Administration with connector for crown cork bottles
- Administration with Multispike connector for use with bags
- Combined cone and female Luer-Lock connector with closure cap
- Conformity to DIN EN 1615

Presentations	Ref. no.
Nutrifix® 1000 ml – HF; set with 1000 ml bag	9240667
Nutrifix® 2500 ml – HF; set with 2500 ml bag	9240685
Nutrifix® FL – HF; administration set	9240669
Nutrifix® Multispike – HF; administration set	9240632
Nutrifix® Universal adapter – HF; administration set	9240621

Enterofix® 1000 – Bag for fluid application



- Bag for fluid application to be used with Multispike connector

Characteristics:

- Storage bag (1.000 ml)
- Connection with Multispike connector (e.g. Enteroport® plus Set Multispike, Nutrifix® Multispike)

Presentations	Ref. no.
Enterofix® 1000	9240800

Nutritub®



- For naso-gastric and naso-intestinal tube feeding. All Nutritub® feeding tubes have a male ENFit™ connection only connectable with female ENFit™

Characteristics:

- Made of soft polyurethane, flexible, without DEHP
- Radio-opaque (stripes), length markings every 10 cm allowing an easy and safe placement control
- Some tubes are equipped with stylet (M)
- Nutritub® Intestinal have weighted ends to ensure intestinal placement

CH	Length in cm	Mandrin / Stylet (M)	Sales Unit	Ref. no.
Nutritub® Naso-gastric tubes with ENFit™				
8	80	-	25	9246535
10	110	●	25	9246512
12	110	●	25	9246543
14	110	●	25	9246513
14	110	-	25	9246514
16	110	●	25	9246515
16	110	-	25	9246516
18	110	●	25	9246518
18	110	-	25	9246519
Nutritub® Naso-intestinal tubes with ENFit™				
8	125	●	25	9246578
12	125	●	25	9246586

Original Perfusor® Line Type Enteral Nutrition ENFit™



Characteristics:

- Syringe connector with male ENFit™ connector for enteral syringe with female ENFit™
- Patient connector with female ENFit™ connector for tube with male ENFit™
- Inner diameter 2.5 mm
- Prime volume 7.4 ml

Length in cm	Sales Unit/ pcs	Ref. no.
150	25	87229910

		Page
Injectable Drugs	Propofol-®Lipuro 0.5 %	Short-acting anesthetic recommended for children 125
	Propofol-®Lipuro 1% Et 2 %	Short-acting anesthetic with reduced pain of injection due to Lipuro technology 126
	Etomidate-®Lipuro	Hypnotic for induction of anesthesia with reduced pain of injection 127
	Midazolam B. Braun	Potent sedative agent for induction and maintenance of anesthesia 128
	Paracetamol B. Braun	Short-term treatment of pain and fever, convenient (ready-to-use) Ecoflac® Plus container 129
	Gentamicin B. Braun	Antibiotic against severe infections in a convenient (ready-to-use) Ecoflac® container 130
	Metronidazole B. Braun	Antibiotic against anaerobic bacteria in a convenient (ready-to-use) Ecoflac® container 131
	Ropivacaine B. Braun	Local anesthetic drug for infiltration, neuroaxial and peripheral nerve blocks 132
	Lidocaine B. Braun 1 % (10 mg/ml) and 2 % (20 mg/ml)	Rapid onset local anesthetic drug 133
	Ondansetron B. Braun	Prophylaxis and treatment of nausea and vomiting 134
	Naloxone B. Braun 0.4 mg/ml	Opioid antagonist for the complete or partial reversal of the adverse effects of opioids 135
	Heparin	Non-fractionated heparin for prophylaxis of thrombo-embolism 136

Propofol-®Lipuro 0.5 % (5 mg/ml)



User benefits

- Approved for anesthesia induction in patients over 1 month of age
- VAS < 20 mm in children (2-6 years old)²
- No dilution or mixing with local anesthetics
- Low concentration allows more precise dose titration

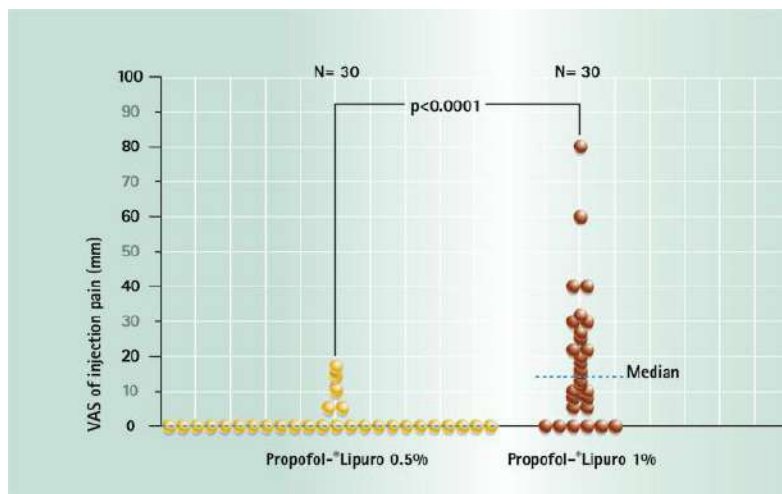
Therapeutic Indications

Propofol-®Lipuro 0.5 % is a short-acting intravenous general anesthetic for

- induction of general anesthesia for adults and children over 1 month of age
- short-term sedation for diagnostic and surgical procedures, alone or in combination with local or regional anesthesia in adults only
- induction of sedation for diagnostical and surgical procedures for adults and children over 1 month of age

A clinical trial²⁾ involving 30 +30 children examined the rate of pain sensation between patients receiving Propofol-®Lipuro 0.5% versus those receiving Propofol-®Lipuro 1% (measured by Visual Analog Score (VAS)).

Although the intensity of pain sensation with Propofol-®Lipuro was already at a low level (median VAS = 1.5) the use of Propofol-®Lipuro 0.5% could even avoid any pain reporting beyond VAS =2. Propofol-®Lipuro 0.5% significantly decreases the intensity of pain sensation in comparison to the well-tolerated Propofol-®Lipuro 1%.



References:

- 1) Soltesz S et al. Effect of a 0.5% dilution of propofol on pain on injection during induction of anesthesia in children. Anesthesiology 2007, 106: 80-84
- 2) A comparison of venous tolerability and injection pain of Propofol diluted in a lipid emulsion and standard Propofol in the induction of anesthesia in children (Sponsor Study Code: BBMDE-0312). on file

Container: Propofol-®Lipuro 0.5 %: 5 x 20 ml (glass ampoules)

Ref. no. 3656353 Std. Engl.

Propofol-®Lipuro 1 % (10 mg/ml) / 2 % (20 mg/ml)



User benefits Propofol-®Lipuro 1 %

- Significant reduction of injection pain
- Rapid onset and quick recovery
- Excellent Anesthesia control

User benefits Propofol-®Lipuro 2 %

- Reduced lipid and fluid load
- Improved lung function
- Enhanced liver function
- Sustained immune function

Therapeutic Indications for Propofol-®Lipuro 1%

Propofol-®Lipuro 1 % is a short-acting intravenous general anesthetic for

- induction and maintenance of general anesthesia for adults and children over 1 month of age
- sedation of ventilated patients in the intensive care unit for adults over 16 years of age
- sedation for diagnostic and surgical procedures, alone or in combination with local or regional Anesthesia for adults and children over 1 months of age

Therapeutic Indications for Propofol-®Lipuro 2%

Propofol-®Lipuro 2 % is a short-acting intravenous general anesthetic for

- induction and maintenance of general anesthesia for adults and children over 3 years of age
- sedation of ventilated patients in the intensive care unit for adults over 16 years of age
- sedation for diagnostic and surgical procedures, alone or in combination with local or regional anesthesia for adults and children over 3 years of age

Container:

Propofol-®Lipuro 1 %: 5 x 20 ml (glass ampoules)

Propofol-®Lipuro 1 %: 10 x 50 ml (glass bottles)

Propofol-®Lipuro 1 %: 10 x 100 ml (glass bottles); bottles sealed with rubber stopper

Propofol-®Lipuro 2 %: 10 x 50 ml (glass bottles); bottles sealed with rubber stopper

Ref. no. 3656308 Std. Engl.

Ref. no. 3656351 Std. Engl.

Ref. no. 3656352 Std. Engl.

Ref. no. 3656350 Std. Engl.

Etomidate-®Lipuro 2 mg/ml



User benefits

- No pain on injection
- No thrombophlebitis
- Minimal cardiovascular effects
- Ready-to-use: No pre-dissolving or dilution necessary

Therapeutic Indications

Etomidate-®Lipuro is an intravenous hypnotic agent for

- induction of general anesthesia in adults, infants and toddlers older than 6 months, children and adolescents
- short-term anesthesia in conjunction with a suitable analgesic

Midazolam B. Braun 1 mg/ml and 5 mg/ml



User benefits

- Midazolam* is one of the most frequently used IV anesthetics
- Presentations of 5 mg, 15 mg or 50 mg offer high flexibility according to patients need and reduce waste
- User friendly Mini-Plasco® Connect container :
 - Integrated finger stopper prevents contamination of ampoule neck
 - Drip-free and needle-free withdrawal
 - 100 % protection against needle-related injuries

Therapeutic Indications

Midazolam B. Braun is a short-acting sleep-inducing anesthetic that is indicated:

In adults:

- CONSCIOUS SEDATION before and during diagnostic or therapeutic procedures with or without local anesthesia
- Anesthesia
 - premedication before induction of anesthesia
 - induction of Anesthesia
 - as a sedative component in combined anesthesia
- SEDATION in intensive care unit

In children (older than 6 months):

- CONSCIOUS SEDATION before and during diagnostic or therapeutic procedures with or without local anesthesia
- Anesthesia
 - premedication before induction of anesthesia
- SEDATION in intensive care unit

Container: Midazolam B.Braun 5 mg/1 ml
 Midazolam B.Braun 15 mg/3 ml
 Midazolam B.Braun 5 mg/5 ml
 Midazolam B.Braun 50 mg/10 ml

1 ml glass ampoule 10 x 1 ml
 3 ml glass ampoule 10 x 3 ml
 5 ml Mini-Plasco® Connect 20 x 5 ml
 10 ml Mini-Plasco® Connect 20 x 10 ml

ref. no. 3656341 Std. English
 ref. no. 3656340 Std. English
 ref. no. 3656359 Std. English
 ref. no. 3656358 Std. English

* Midazolam is classified as narcotic drug in most countries. Please check local import regulations before placing orders. Product availability and article numbers can vary between countries. Please contact the local B.Braun representative.

Paracetamol B. Braun 10 mg/ml



User benefits

- Easy and rapid infusion administration due to Ecoflac® Plus convenience system
- Provides predictable and fast pain relief
- A foundation for effective pain treatment
- Ready-to-use
- Ecoflac® Plus convenience container: unbreakable, upright standing, safe transport and storage

Therapeutic Indications

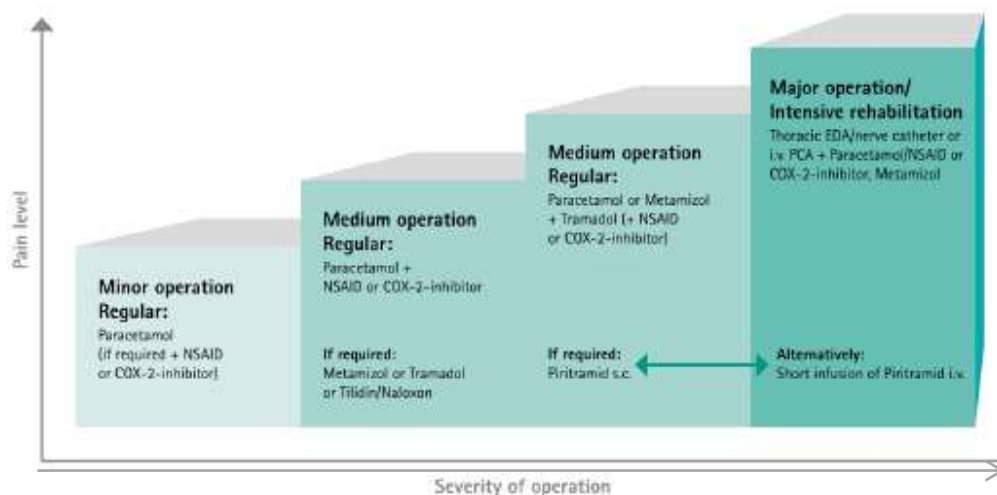
- Short-term treatment of moderate pain, especially following surgery,
- Short-term treatment of fever, when administration by intravenous route is clinically justified by an urgent need to treat pain or hyperthermia and/or when other routes of administration are not possible.

Posology and methods of administration

- The 10 ml ampoule is restricted to term newborn infants, infants and toddlers weighing up to 10 kg.
- The 50 ml bottle is restricted to term newborn infants, infants, toddlers and children weighing less than 33 kg
- The 100 ml bottle is restricted to adults, adolescents and children weighing more than 33 kg (approx. 11 years old).

Paracetamol – the foundation of analgesia

Concept of a graduated pain therapy after operations of differing severity¹⁸



Container: Paracetamol B. Braun 10 mg/ml (500 mg/50 ml): 10 x 50ml (Ecoflac® Plus)
Paracetamol B. Braun 10 mg/ml (1000 mg/100 ml): 10 x 50ml (Ecoflac® Plus)
Paracetamol B. Braun 10 mg/ml 20x10 ml (MiniPlasco®)

Ref. no. 3656355 Std. Engl.
Ref. no. 3656355 Std. Engl.
Ref. no. 3657677 Std. Engl.

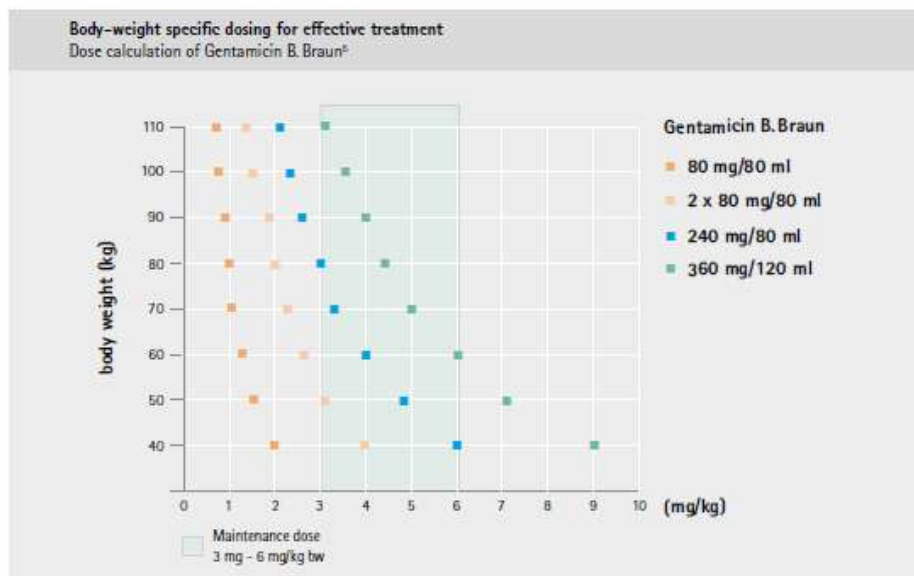
Sales Unit: 10 x Ecoflac® Plus 50 ml or 100 ml container per box

Gentamicin B. Braun 80 mg/ 240 mg/ 360 mg



User benefits

- Easy and rapid infusion administration due to Ecoflac® Plus convenience system
- Ready-to-use
- Ecoflac® Plus convenience container: unbreakable, upright standing, safe transport and storage



Please carefully consider different strengths and sizes of Gentamicin B. Braun before administering to the patient. You may need to administer a specific volume to treat the patient on an individual dosage according to body weight. For this B. Braun provides Dosifix®, a volume control IV administration set with a dosage burette of 150 ml.

Therapeutic Indications

Gentamicin B. Braun is an intravenous antibiotic to treat severe infections due to bacteria susceptible to gentamicin

- treatment of complicated urinary infections
- treatment of nosocomial respiratory tract infections including severe pneumonia
- treatment of intra-abdominal infections incl. peritonitis
- treatment of bone infections including joints

Container: Gentamicin B. Braun 80 mg (1 mg/ml): 20 x 100ml (Ecoflac® Plus) filled with 80 ml
 Gentamicin B. Braun 240 mg (3 mg/ml): 20 x 100ml (Ecoflac® Plus) filled with 80 ml
 Gentamicin B. Braun 360 mg (3 mg/ml): 20 x 100ml (Ecoflac® Plus) filled with 120 ml

Ref. no. 3656346 Std. Engl.
 Ref. no. 3656347 Std. Engl.
 Ref. no. 3656348 Std. Engl.

Metronidazole B. Braun 500 mg



User benefits

- Well-known and safe antibiotic
- Easy and rapid infusion administration due to Ecoflac® Plus convenience system
- Ecoflac® Plus convenience container: unbreakable, upright standing, safe transport and storage
- Ready-to-use

Therapeutic Indications

Metronidazole B. Braun is an intravenous antibiotic for treatment and prophylaxis of infections caused by bacteria susceptible to metronidazole (mainly anaerobic bacteria)

- infection of central nervous system
- respiratory tract infections
- endocarditis
- bone and joint infections
- infections in the gastrointestinal tract and in the abdominal area

Container: Metronidazole B. Braun 500 mg: 20 x 100ml (Ecoflac® plus)

Ref. no. 3656354 Std. Engl.

Ropivacaine HCl B. Braun 2 mg/ml / 5 mg/ml / 7.5 mg/ml / 10 mg/ml



Ropivacaine vs. Bupivacaine

- Local anesthetic drug for infiltration, neuroaxial and peripheral nerve blocks
- Faster return of motor function^{1,2}
- Similarly effective sensor blockade^{1,2}
- Significant reduction in the need for opioids³
- Improved safety profile on cardiovascular and CNS system^{4,5}

User benefits Mini-Plasco® connect

- Integrated finger stopper prevents contamination of ampoule neck
- Drip-free and needle-free withdrawal
- 100 % protection against needle-related injuries

Therapeutic indications

Ropivacaine 7.5 mg/ml, 10 mg/ml:

Surgical Anesthesia:

- Epidural blocks for surgery, including Caesarean section
- Major nerve blocks
- Field blocks

Ropivacaine 2 mg/ml:

Acute pain management:

- Continuous epidural infusion or intermittent bolus administration during postoperative or labour pain
- Field blocks
- Continuous peripheral nerve block

Ropivacaine 5 mg/ml:

- Intrathecal administration in surgical anesthesia
- Single peripheral nerve block

References:

- 1) Beaudieu P., Babin D., Hammerling T., Anesth Analg. 2006;103;768-774
- 2) McGlade DP., Kalpokas MV, Mooney PH, Anesth Intensive Care 1998;26;515-520
- 3) Kucuk C., Kadiogulari N., Canoler O., Surg Today 2007;347;369-400
- 4) Scott DB Lee A., Fagan D., Anesth Analg. 1989;69;563-569
- 5) Knudsen K, Beckmann Suurkul a M., Br J Angesth. 1997;78;507-514

Lidocaine B. Braun 1 % (10 mg/ml) and 2 % (20 mg/ml)



User benefits

- Preservative-free formulation

User friendly Mini-Plasco® Connect container:

- Integrated finger stopper prevents contamination of ampoule neck
- Drip-free and needle-free withdrawal
- 100 % protection against needle-related injuries

Therapeutic indications

Local and regional anesthesia

Container: Lidocaine B. Braun 1% (200mg/20ml): 20 x 20 ml (MiniPlasco® Connect)

Ref. no. 3656318 Std. Engl.

Lidocaine B. Braun 2% (400mg/20ml): 20 x 20 ml (MiniPlasco® Connect)

Ref. no. 3655490 Std. Engl.

Ondansetron B. Braun 2 mg/ml



User benefits

- Full indication for prophylaxis and treatment of PONV, CINV and RINV
- No change required in user habits due to complete bioequivalence to originator drug

User friendly Mini-Plasco® Connect (only 4 ml) container:

- Integrated finger stopper prevents contamination of ampoule neck
- Drip-free and needle-free withdrawal
- Eliminates needle-related injuries
- Eliminates cuts and scratches

Therapeutic indications

Adults:

- Prevention and treatment of nausea and vomiting induced by cytotoxic chemotherapy and radiotherapy (CINV / RINV)
- Prevention and treatment of post-operative nausea and vomiting (PONV)

Children:

- Management of chemotherapy-induced nausea and vomiting (CINV) in children aged ≥ 6 months
- Prevention and treatment of post-operative nausea and vomiting (PONV) in children aged ≥ 1 month

Naloxone B. Braun 0.4 mg/ml



User benefits

- Antagonist for natural and synthetic opioids
- Complete or partial reversal of opioid effects
- Solution for injection and infusion

Therapeutic indications

Complete or partial reversal of CNS and especially respiratory depression, caused by natural or synthetic opioids.

- Diagnosis of suspected acute opioid overdose or intoxication
- Complete or partial of respiratory and other CNS depression in neonates whose mothers have received opioids

Heparin Sodium B. Braun 5000 I.U./ml



Properties

Heparin is an indispensable drug for patients in different situations like venous thromboembolism, cardiology, vascular surgery, invasive procedures, dialysis and extra corporal blood circulation.

- Contains benzyl alcohol as preservative
- Aqueous solution

Therapeutic Indications

- Therapy of acute venous and arterial thromboembolism (including early treatment of myocardial infarction and unstable angina pectoris)
- Prophylaxis of thromboembolism
- Prevention of blood clotting during use of extracorporeal circulation (e.g. cardiopulmonary bypass, haemodialysis)

Container: Heparin Sodium Inj. 5000 I.U./ml: 10 x 50 ml (glass vial)

Ref. no. 350592 Std. Engl.

B. Braun Melsungen AG | 34209 Melsungen | Germany
Tel +49(0) 5661 71-0 | www.bbraun.com