



PRESCRIPTION

PATIENT ACCESS

PREPARATION

APPLICATION

DISCHARGE MANAGEMEN

Certofix®

Central Venous Catheter Sets

Your Partner for Central Venous Catheters



BROAD RANGE OF CHOICES FOR ANY APPLICATION

The B. Braun Certofix® product range offers a comprehensive portfolio of acute central venous catheter (CVC) sets for both adult and paediatric patients. Certofix® CVCs are used in various acute care environments in the hospital.

INDICATED THERAPIES

- Vasopressors / Inotropes
- Vessel-irritating drugs
- Parenteral nutrition
- IV Solutions with high osmolality
- Chemotherapy
- Difficult peripheral vein access
- Hemodynamic monitoring*
- Transfusion of blood products

* In combination with other devices e.g. Pulmonary Artery Catheter

USER ENVIRONMENTS





OPERATING ROOM



ICU



ONCOLOGY



PAEDIATRICS



CVC Placement with Certofix®

B. Braun – Your System Partner for Ultrasound-guided CVC Placement and ECG-guided Catheter Tip Positioning

POINT OF CARE ULTRASOUND GUIDED CVC PLACEMENT















21.00



Safety Seldinger needle

 Active safety clip (after use) to prevent needle stick injury

Valve needle

- Allows guidewire insertion and aspiration without disconnecting the syringe
- Prevents air embolism and excessive blood loss during guidewire insertion

Safety Scalpel

 The scalpel can be slid back into the housing and blocked to prevent sharps injury

The Nitinol Guidewires

- Flexible and resilient to kinking or knotting, to facilitate successful insertion of guidewire and placement of CVC
- "J" and a straight tip in one wire. Both tips are flexible and suitable for insertion
- All guidewires have length markings

Certodyn® Universal Adapters, Alphacard® and ECG Cable

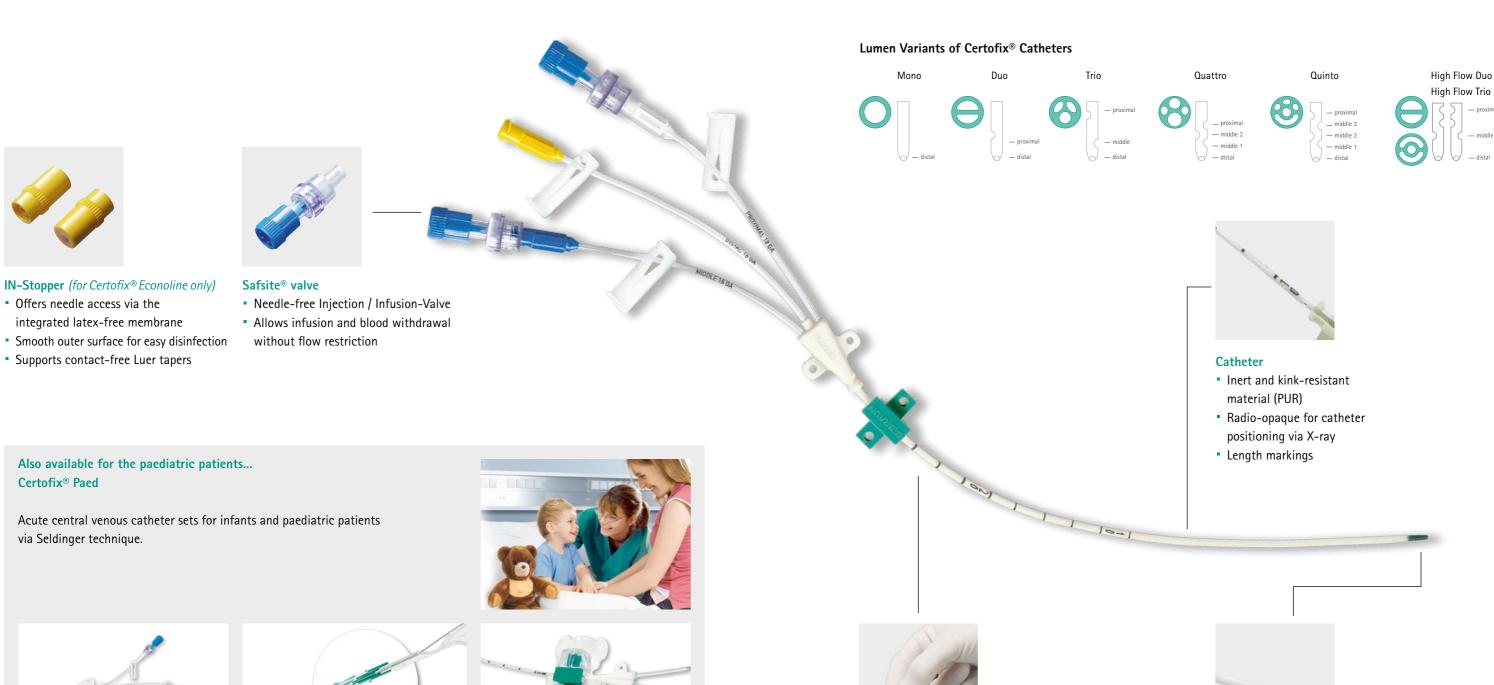
INTRAATRIAL ECG FOR CATHETER TIP POSITIONING

 Accessories to confirm CVC tip position during or after placement via Intraatrial ECG. Compatible with most commonly used ECG monitors.

Selected highlight products depicted. See overview on page 8/9 (Certofix® Set Configurations).

Certofix®

Safety Features in Catheter Use and Maintenance



Choice of catheter

 Various sizes and lumen available for infant and paediatric patients according to age, body weight and therapy needs



- Premounted to paediatric guidewire
- Facilitates advancing guidewire tip into the introducer needle

"Teddy Bear" Statlock fixation*

Non-sutured catheter fixation

Tolerated by infants and children

Movable Fixation Clips

 To adjust optimal skin fixation position with sutured or non-sutured fixation

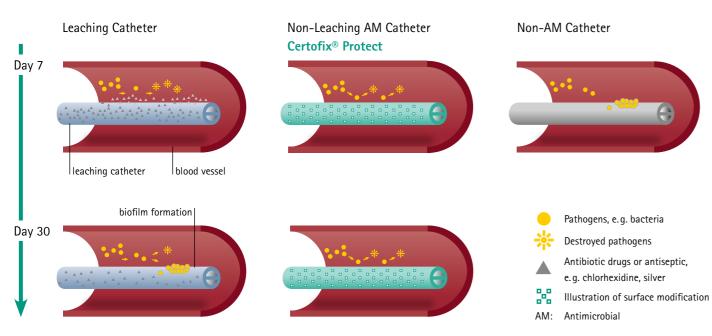
Soft tip

 Soft and pliant tip material (PUR)

Certofix® Protect

Central Venous Catheters with Proven Non-leaching Antimicrobial Effect Durable over 30 Days





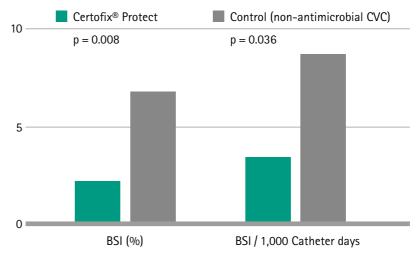
Antimicrobial CVCs	"Leaching"	"Non-Leaching"
Antimicrobial	Coated or impregnated with silver, antiseptics	A non-leaching technology with polymer surface
material	(chlorhexidine) or antibiotic drugs	modification, on both outer surface and internal
		luminal surface
Mode of Action	Antimicrobial effect by active release of antibiotic	Antimicrobial effect by polymer surface modifi-
	drug or antiseptics which directly damage and	cation, prevent adhesion of pathogens, microbial
	inhibit pathogen growth	colonization and biofilm formation 7-9
Durability	Antimicrobial activity against pathogen declines signifi-	Antimicrobial activity does not decline.
	cantly at day 7 and disappears at 28 days of dwell time $^{\mbox{\scriptsize 10}}$	Proven durability over 30 days ⁹
Antimicrobial	Gaps in antimicrobial spectrum from material	Antimicrobial effect proven with all typical
Spectrum	with ionized silver or antibiotic drugs 10	CLABSI* eligible pathogens 8-9
Risks and Concerns	- Risk of adverse effects from antibiotics 11	- Antibiotic-free
	- Concern of antibiotic resistance 11-14	

^{*}CLABSI: Central line-associated bloodstream infections

Note: The illustrations are to be used for explaining mechanism only

Infectious complications can occur during prolonged use of CVCs

- Central line-associated bloodstream infections, (CLABSI) are associated with increased morbidity, mortality, and health care costs 1,2
- Biofilm formation is the key process in the pathogenesis of CLABSI 3,4
- Risk of CRBSI** rapidly increase from dwell time at day 7-9⁵



A clinical study with Certofix® Protect has proven

- Use of Certofix® Protect is associated with significant reduction of blood stream infection (BSI) from 6.5% to 2% and from 8.3 to 3.2/1,000 Catheter days
- The group using Certofix® Protect underwent less antibiotic therapy 6



The "Roll-out" test showed:

- Certofix® Protect prevents microbial colonization and biofilm formation over 30 days
- The antimicrobial efficacy is proven with typical bacteria and fungi causing CVC associated blood stream infection 9



The same test results were obtained for:

- · Staphylococcus epidermidis, Pseudomonas aeruginosa
- Escherichia coli, Enterococus faecalis
- Klebsiella pneumoniae
- · Fungi: Candida albicans

^{**} CRBSI: Catheter-related bloodstream infections

Certofix® Set Configurations

Set Configuration	Catheter Vari	ants (only one c	eatheter in each s	set)				Accessories							
	Mono	Duo	Trio	Quattro	Quinto	HF Duo	HF Trio	Introducer Needle	Nitinol Guidewire	Syringe	Scalpel	Dilator	ECG Cable	Needle-free connector	Non-sutured Fixation
Certofix® Standard S Sets	•		-		•			Seldinger	-	-	*		-	Safsite®*	
Certofix® Standard V Sets	•		•		•			Valve	•		*		•	Safsite®*	
Certofix® Protect	•		•		•	-	-	Valve	•		*		•	Safsite®*	
Certofix® High Flow							•	Valve/ Seldinger	•		•		•	Safsite®	
Certofix® Safety	•				•			Safety Seldinger	•		* **		•	Safsite®*	
Certofix® Econoline	•		•					Seldinger	•					Instopper	
Certofix® Paed	•		•					Seldinger	•		-	•*	•	Safsite® or Discofix® 3-way stopcock	Statlock

HF: high flow

Lumen Variants of Certofix® Catheters





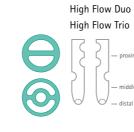
















ProSet Customized CVC kits in modular system https://www.bbraun.com/en/products-and-therapies/ services/proset.html#



More Information on Product and Therapy www.bbraun.com

^{*} Not in sets with Mono Lumen CVC

^{**} Safety Scalpel

Certofix® Standard Sets

Name					Catheter**	Introduc	er Needle	Gui	dewire***					Other Accessories	
Certofix® Standard V-Sets	Lumen	Size (Fr)	Length (cm)	Lumen Ø (Gauge) D/M1/M2/M3/P	min. Flow Rate (ml/min) D/M1/M2/M3/P	Туре	Gauge	Length (cm)	Ø (mm)	Syringe	Scalpel	Dilator (Fr)	Connection cable ECG	Needle Free Connector Safsite®	Article No.* (REF)
Mono V 220	1	4	20	18	18	V	20	50	0.63	5 ml	-	5	1x		4160215
Mono V 315	1	5	15	16	60	V	18	50	0.89	5 ml	-	6	1x	_	4160231
Mono V 320	1	5	20	16	52	V	18	50	0.89	5 ml	-	6	1x	-	4160266
Mono V 330	1	5	30	16	40	V	18	70	0.89	5 ml	-	6	1x	-	4160290
Mono V 415	1	6	15	14	90	V	18	50	0.89	5 ml	-	8	1x	-	4160517
Mono V 420	1	6	20	14	80	V	18	50	0.89	5 ml	-	8	1x	-	4160320
Mono V 430	1	6	30	14	75	V	18	70	0.89	5 ml	-	8	1x	-	4160789
Duo V 715	2	7	15	16/16	60/50	V	18	50	0.89	5 ml	1x	8	1x	2x	4166159
Duo V 720	2	7	20	16/16	55/45	V	18	50	0.89	5 ml	1x	8	1x	2x	4161211
Duo V 730	2	7	30	16/16	52/37	V	18	70	0.89	5 ml	1x	8	1x	2x	4161319
Trio V 715	3	7	15	16/18/18	50/28/28	V	18	50	0.89	5 ml	1x	8	1x	3x	4162153
Trio V 720	3	7	20	16/18/18	46/22/22	V	18	50	0.89	5 ml	1x	8	1x	3x	4163214
Trio V 730	3	7	30	16/18/18	38/18/18	V	18	70	0.89	5 ml	1x	8	1x	3x	4163311
Quattro V 815	4	8	15	14/18/18/16	50/20/20/50		18	50	0.89	5 ml	1x	9	1x	4x	4167767
Quattro V 820	4	8	20	14/18/18/16	40/15/15/40	V	18	50	0.89	5 ml	1x	9	1x	4x	4167775
Quattro V 830	4	8	30	14/18/18/16	35/10/10/35	V	18	70	0.89	5 ml	1x	9	1x	4x	4167783
Quinto V 1215	5	12	15	16/18/18/18/12	65/32/32/30/225	V	18	50	0.89	5 ml	1x	12	1x	5x	4166841
Quinto V 1220	5	12	20	16/18/18/18/12	55/28/28/28/185	V	18	50	0.89	5 ml	1x	12	1x	5x	4166868

Name					Catheter**	Introduc	er Needle	Gui	idewire***					Other Accessories	
Certofix® Standard S-Sets	Lumen	Size (Fr)	Length (cm)	Lumen Ø (Gauge) D/M1/M2/M3/P	min. Flow Rate (ml/min) D/M1/M2/M3/P	Туре	Gauge	Length (cm)	Ø (mm)	Syringe	Scalpel	Dilator (Fr)	Connection cable ECG	Needle Free Connector Safsite®	Article No.* (REF)
Mono S 215	1	4	15	18	23	S	20	50	0.63	5 ml	-	5	1x	-	4160185
Mono S 220	1	4	20	18	18	S	20	50	0.63	5 ml	-	5	1x	-	4160207
Mono S 315	1	5	15	16	60	S	18	50	0.89	5 ml	-	6	1x		4160223
Mono S 320	1	5	20	16	52	S	18	50	0.89	5 ml	-	6	1x	-	4160258
Mono S 330	1	5	30	16	40	S	18	70	0.89	5 ml	-	6	1x	-	4160282
Mono S 415	1	6	15	14	90	S	18	50	0.89	5 ml	-	8	1x	-	4160509
Mono S 420	1	6	20	14	80	S	18	50	0.89	5 ml	-	8	1x	-	4160304
Mono S 430	1	6	30	14	75	S	18	70	0.89	5 ml	-	8	1x		4160762
Duo S 715	2	7	15	16/16	60/50	S	18	50	0.89	5 ml	1x	8	1x	2x	4164158
Duo S 720	2	7	20	16/16	55/45	S	18	50	0.89	5 ml	1x	8	1x	2x	4167385
Duo S 730	2	7	30	16/16	52/37	S	18	70	0.89	5 ml	1x	8	1x	2x	4167394
Trio S 715	3	7	15	16/18/18	50/28/28	S	18	50	0.89	5 ml	1x	8	1x	3x	4161159
Trio S 720	3	7	20	16/18/18	46/22/22	S	18	50	0.89	5 ml	1x	8	1x	3x	4167408
Trio S 730	3	7	30	16/18/18	38/18/18	S	18	70	0.89	5 ml	1x	8	1x	3x	4163306
Quinto S 1220	5	12	20	16/18/18/18/12	55/28/28/28/185	S	18	50	0.89	5 ml	1x	12	1x	5x	4166852

Additional Information Certofix® Standard Sets & Standard S-Sets

V: Valve Needle, S: Seldinger Needle

D: distal, M: middle, P: proximal

The sales unit of Certofix® Standard Sets is 10 pieces/box

- * Note: Please consider country specific article codes with suffix "-07"
- ** All catheters are made of PUR, with soft tip and length marking
- *** All guidewires are made of Nitinol, with one soft J tip and one soft straight tip, printed with length markings and ECG marked

Certofix® Protect

Name					Catheter**	Introduc	er Needle	Gui	dewire***					Other Accessories	
Certofix® Protect	Lumen	Size (Fr)	Length (cm)	Lumen Ø (Gauge) D/M1/M2/M3/P	min. Flow Rate (ml/min) D/M1/M2/M3/P	Туре	Gauge	Length (cm)	Ø (mm)	Syringe	Scalpel	Dilator (Fr)	Connection cable ECG	Needle Free Connector Safsite®	Article No.* (REF)
Mono V 320 P	1	5	20	16	52	V	18	50	0.89	5 ml	-	6	1x		4160266P
Mono V 330 P	1	5	30	16	40	V	18	70	0.89	5 ml	-	6	1x	-	4160290P
Mono V 420 P	1	6	20	14	80	V	18	50	0.89	5 ml	-	8	1x		4160320P
Mono V 430 P	1	6	30	14	75	V	18	70	0.89	5 ml	-	8	1x		4160789P
Duo V 715 P	2	7	15	16/16	60/50	V	18	50	0.89	5 ml	1x	8	1x	2x	4166159P
Duo V 720 P	2	7	20	16/16	55/45	V	18	50	0.89	5 ml	1x	8	1x	2x	4161211P
Duo V 730 P	2	7	30	16/16	52/37	V	18	70	0.89	5 ml	1x	8	1x	2x	4161319P
Duo HF V 720 P	2	7	20	14/18	100/27	V	18	50	0.89	5 ml	1x	8	1x	2x	4168534P
Trio V 715 P	3	7	15	16/18/18	50/28/28	V	18	50	0.89	5 ml	1x	8	1x	3x	4162153P
Trio V 720 P	3	7	20	16/18/18	46/22/22	V	18	50	0.89	5 ml	1x	8	1x	3x	4163214P
Trio V 730 P	3	7	30	16/18/18	38/18/18	V	18	70	0.89	5 ml	1x	8	1x	3x	4163311P
Trio HF V 1220 P	3	12	20	16/12/12	55/165/165	V	18	50	0.89	5 ml	1x	12	1x	3x	4160622P
Quattro V 815 P	4	8	15	14/18/18/16	50/20/20/50		18	50	0.89	5 ml	1x	9	1x	4x	4167767P
Quattro V 820 P	4	8	20	14/18/18/16	40/15/15/40	V	18	50	0.89	5 ml	1x	9	1x	4x	4167775P
Quattro V 830 P	4	8	30	14/18/18/16	35/10/10/35	V	18	70	0.89	5 ml	1x	9	1x	4x	4167783P
Quinto V 1220 P	5	12	20	16/18/18/18/12	55/28/28/28/185	V	18	50	0.89	5 ml	1x	12	1x	5x	4166868P

Certofix® High Flow

Name					Catheter**	Introduc	er Needle	Gui	dewire***					Other Accessories	
Certofix® High Flow	Lumen	Size (Fr)	Length (cm)	Lumen Ø (Gauge) D/M/P	min. Flow Rate (ml/min) D/M/P	Туре	Gauge	Length (cm)	Ø (mm)	Syringe	Scalpel	Dilator (Fr)	Connection cable ECG	Needle Free Connector Safsite®	Article No.* (REF)
Duo HF V 715	2	7	15	14/18	105/42	V	18	50	0.89	5 ml	1x	8	1x	2x	4168518
Duo HF V 720	2	7	20	14/18	100/27	V	18	50	0.89	5 ml	1x	8	1x	2x	4168534
Duo HF S 720	2	7	20	14/18	100/27	S	18	50	0.89	5 ml	1x	8	1x	2x	4168528
Duo HF V 920	2	9	20	13/13	95/120	V	18	50	0.89	5 ml	1x	9	1x	2x	4167511
Duo HF V 1215	2	12	15	11/11	260/260	V	18	50	0.89	5 ml	1x	12	1x	2x	4167538
Duo HF V 1220	2	12	20	11/11	230/230	V	18	50	0.89	5 ml	1x	12	1x	2x	4167546
Trio HF V 1215	3	12	15	16/12/12	65/255/255		18	50	0.89	5 ml	1x	12	1x	3x	4160614
Trio HF S 1215	3	12	15	16/12/12	65/255/255	S	18	50	0.89	5 ml	1x	12	1x	3x	4160578
Trio HF V 1220	3	12	20	16/12/12	55/165/165	V	18	50	0.89	5 ml	1x	12	1x	3x	4160622
Trio HF S 1220	3	12	20	16/12/12	55/165/165	S	18	50	0.89	5 ml	1x	12	1x	3x	4160586
Protect Duo HF V 720 P	2	7	20	14/18	100/27	V	18	50	0.89	5 ml	1x	8	1x	2x	4168534P
Protect Trio HF V 1220 P	3	12	20	16/12/12	55/165/165	V	18	50	0.89	5 ml	1x	12	1x	3x	4160622P

Additional Information Certofix® Protect

V: Valve Needle

D: distal, M: middle, P: proximal

The sales unit of Certofix® Protect Sets is 10 pieces/box

- * Note: Please consider country specific article codes with suffix "-07"
- ** The base material of the central venous catheter consists of polyurethane. All lumen, including the hub and the outer surface of the catheter are coated with a long-chain high-molecular polymer-based methacrylate. This modified surface is non-covalently linked to the polyurethane catheter material and is embedded and bonded to the base material of the catheter. The polymer's chemically modified side groups are freely accessible on the catheter surface. They contain hydrophilic side groups such as polyethylene glycol and antiseptic biguanide side groups. The side chain which is derived from a polymeric biguanide is chemically similar to the antiseptic polihexanide.
- *** All guidewires are made of Nitinol, with one soft J tip and one soft straight tip, printed with length markings and ECG marked

Additional Information Certofix® High Flow

V: Valve Needle, S: Seldinger Needle D: distal, M: middle, P: proximal

The sales unit of Certofix® High Flow Sets is 10 pieces/box

- * Note: Please consider country specific article codes with suffix "-07"
- ** All catheters are made of PUR, with soft tip and length marking
- *** All guidewires are made of Nitinol, with one soft J tip and one soft straight tip, printed with length markings and ECG marked

Certofix® Safety

Name					Catheter**	Introduc	er Needle	Gui	dewire***					Other Accessories	
Certofix® Safety	Lumen	Size (Fr)	Length (cm)	Lumen Ø (Gauge) D/M1/M2/M3/P	min. Flow Rate (ml/min) D/M1/M2/M3/P	Туре	Gauge	Length (cm)	Ø (mm)	Syringe	Scalpel	Dilator (Fr)	Connection cable ECG	Needle Free Connector Safsite®	Article No.* (REF)
Mono S 320	1	6	20	16	52	Safety	18	50	0.89	5 ml	-	6	1x	-	4160258S
Mono S 330	1	6	30	16	40	Safety	18	70	0.89	5 ml	-	6	1x		41602825
Duo S 720	2	7	20	16/16	55/45	Safety	18	50	0.89	5 ml	Safety	8	1x	2x	41673855
Duo S 730	2	7	30	16/16	52/37	Safety	18	70	0.89	5 ml	Safety	8	1x	2x	41673945
Trio S 720	3	7	20	16/18/18	46/22/22	Safety	18	50	0.89	5 ml	Safety	8	1x	3x	41674085
Trio S 730	3	7	30	16/18/18	38/18/18	Safety	18	70	0.89	5 ml	Safety	8	1x	3x	4163306S
Quattro S 820	4	8	20	14/18/18/16	40/15/15/40	Safety	18	50	0.89	5 ml	Safety	9	1x	4x	4167775S
Quinto S 1220	5	12	20	14/18/18/18/12	55/28/28/28/185	Safety	18	50	0.89	5 ml	Safety	12	1x	5x	4166852S

Additional Information Certofix® Safety

D: distal, M: middle, P: proximal

The sales unit of Certofix® Safety Sets is 10 pieces/box

- * Note: Please consider country specific article codes with suffix "-07"
- ** All catheters are made of PUR, with soft tip and length marking
- *** All guidewires are made of Nitinol, with one soft J tip and one soft straight tip, printed with length markings and ECG marked

Certofix® Paed

Name					Catheter***	Introduce	er Needle	Guid	lewire****	Other Accessories					ccessories	
Certofix® Paed	Lumen	Size (Fr)	Length (cm)	Lumen Ø (Gauge) D/M/P	min. Flow Rate (ml/min) D/M/P	Туре	Gauge	Length (cm)	Ø (mm)	Syringe	Scalpel	Dilator (Fr)	Connection cable ECG	Needle Free Connector Safsite®	Statlock catheter fixation	Article No.* (REF)
Mono S 110	1	3	10	22	15	S	21	25	0.46	3 ml	1x		1x	(instead of Safsite®) 1x Infusion extension line 1x Discofix® 3-way stopcock	1x	4160177**
Duo S 408	2	4	8	22/22	18/18	S	21	50	0.46	5 ml	1x	5	1x	2x	1x	4166906
Duo S 413	2	4	13	22/22	10/10	S	21	50	0.46	5 ml	1x	5	1x	2x	1x	4166922
Duo S 420	2	4	20	22/22	9/9	S	21	50	0.46	5 ml	1x	5	1x	2x	1x	4166949
Duo S 508	2	5	8	18/20	30/15	S	21	50	0.46	5 ml	1x	6	1x	2x	1x	4167112
Duo S 513	2	5	13	18/20	22/11	S	21	50	0.46	5 ml	1x	6	1x	2x	1x	4167139
Duo S 520	2	5	20	18/20	18/9	S	21	50	0.46	5 ml	1x	6	1x	2x	1x	4167155
Trio S 508	3	5	8	20/22/22	30/15/15	S	21	50	0.46	5 ml	1x	6	1x	3x	1x	4167228
Trio S 513	3	5	13	20/22/22	29/10/10	S	21	50	0.46	5 ml	1x	6	1x	3x	1x	4167244
Trio S 520	3	5	20	20/22/22	18/6/6	S	21	50	0.46	5 ml	1x	6	1x	3x	1x	4167260

Additional Information Certofix® Paed

S: Seldinger Needle

D: distal, M: middle, P: proximal

The sales unit of Certofix® Paed Sets is 10 pieces/box

- * Note: Please consider country specific article codes with suffix "-07"
- ** Note: Please consider country specific article codes with suffix "-01" or "-04"
- *** All catheters are made of PUR, with soft tip and length marking
- **** All guidewires are made of Nitinol, with one soft J tip and one soft straight tip, printed with ength markings and ECG marked

Certofix® Econoline

Name					Catheter**	Introduce	er Needle	Guid	dewire***	Other A	ccessories	
Certofix® Econoline	Lumen	Size (Fr)	Length (cm)	Lumen Ø (Gauge) D/M/P	min. Flow Rate (ml/min) D/M/P	Туре	Gauge	Length (cm)	Ø (mm)	IN- Stopper	Dilator (Fr)	Article No.* (REF)
Mono 215	1	4	15	18	16	S	20	50	0.63	1x	5	4160185E
Mono 220	1	4	20	18	13	S	20	50	0.63	1x	5	4160207E
Mono 315	1	5	15	16	55	S	18	50	0.89	1x	6	4160223E
Mono 320	1	5	20	16	45	S	18	50	0.89	1x	6	4160258E
Mono 330	1	5	30	16	40	S	18	70	0.89	1x	6	4160282E
Mono 415	1	6	15	14	95	S	18	50	0.89	1x	8	4160509E
Mono 420	1	6	20	14	85	S	18	50	0.89	1x	8	4160304E
Mono 430	1	6	30	14	75	S	18	70	0.89	1x	8	4160762E
Duo 715	2	7	15	16/16	60/50	S	18	50	0.89	2x	8	4164156E
Duo 720	2	7	20	16/16	55/45	S	18	50	0.89	2x	8	4162200E
Duo 730	2	7	30	16/16	52/37	S	18	70	0.89	2x	8	4162307E
Trio 715	3	7	15	16/18/18	50/28/28	S	18	50	0.89	3x	8	4161157E
Trio 720	3	7	20	16/18/18	46/22/22	S	18	50	0.89	3x	8	4163206E
Trio 730	3	7	30	16/18/18	38/18/18	S	18	70	0.89	3x	8	4163303E

ACCESSORIES FOR CATHETER TIP POSITIONING WITH ECG

Accessories	Description	Article No.*
Ø.	Certodyn Universal® Adapter	
	Electronic switch box (for adults)	4150228
	Certodyn Universal® Adapter Paed	
	Electronic switch box (for paediatric patient)	4150724
	Alphacard®	
Tours of the second of the sec	Syringe with electrode to Certodyn® universal adapter	U1800401

Additional Information Certofix® Econoline

S: Seldinger Needle

D: distal, M: middle, P: proximal

The sales unit of Certofix® Econoline Sets is 10 pieces/box

- * Note: Please consider country specific article codes with suffix "-07"
- ** All catheters are made of PUR, with soft tip and length marking
- *** All guidewires are made of Nitinol, with one soft J tip and one soft straight tip, printed with length markings and ECG marked

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