

PRESCRIPTION

PATIENT ACCESS

PREPARATION

APPLICATION

DISCHARGE
MANAGEMENT

Certofix[®]

Central Venous Catheter Sets

Your Partner for Central Venous Catheters



USER ENVIRONMENTS

EMERGENCY ROOM



OPERATING ROOM



ICU



ONCOLOGY



PAEDIATRICS





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

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



Safety Seldinger needle

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



Valve needle

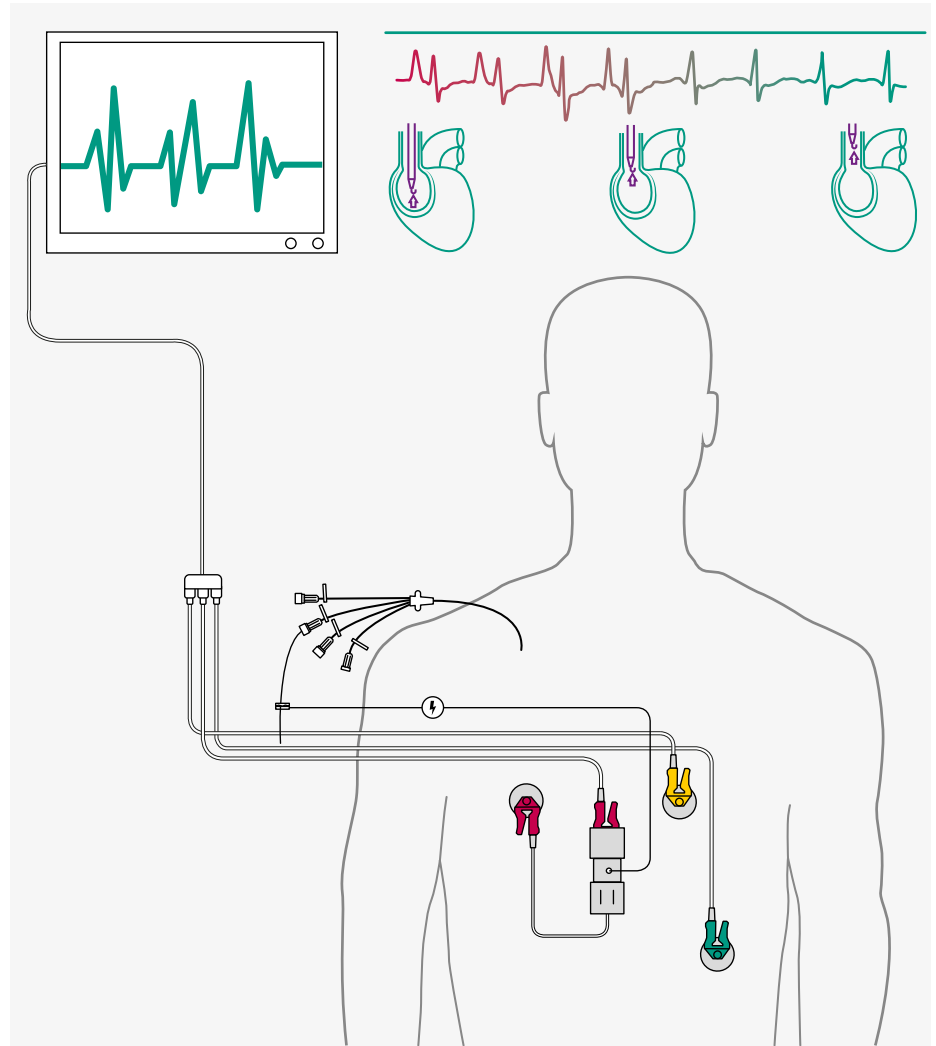
- Allows guidewire insertion and aspiration without disconnecting the syringe
- Prevents air embolism and excessive blood loss during guidewire insertion



Safety Scalpel

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

ECG BASED CENTRAL VENOUS CATHETER TIP PLACEMENT AND POSITION CONTROL



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

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

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

Certofix®

Safety Features in Catheter Use and Maintenance



IN-Stopper (for Certofix® Econoline only)

- Offers needle access via the integrated latex-free membrane
- Smooth outer surface for easy disinfection
- Supports contact-free Luer tapers



Safsite® valve

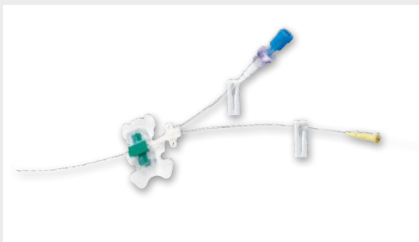
- Needle-free Injection / Infusion-Valve
- Allows infusion and blood withdrawal without flow restriction



Also available for the paediatric patients...

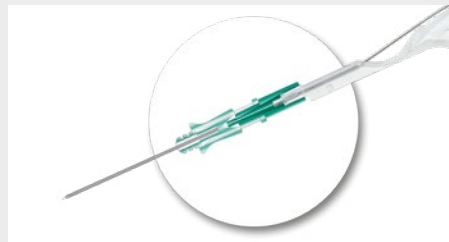
Certofix® Paed

Acute central venous catheter sets for infants and paediatric patients via Seldinger technique.



Choice of catheter

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



Dispenser adapter

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

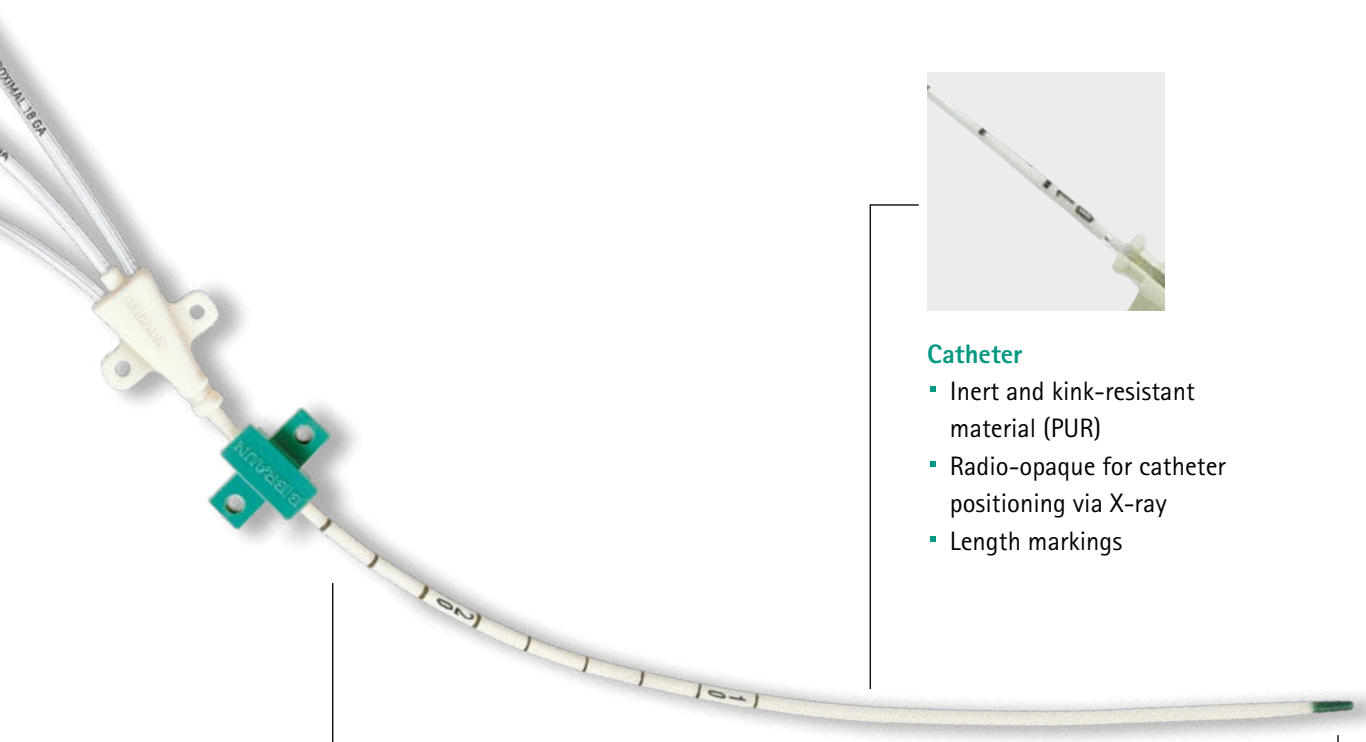
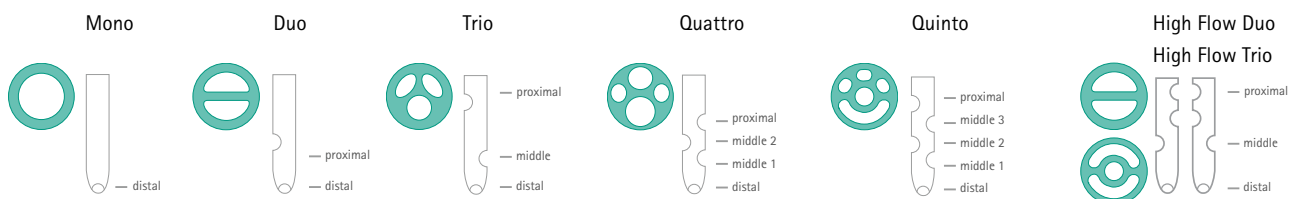


"Teddy Bear" Statlock fixation*

Non-sutured catheter fixation

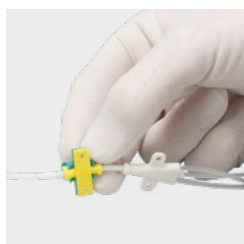
- Tolerated by infants and children

Lumen Variants of Certofix® Catheters



Catheter

- Inert and kink-resistant material (PUR)
- Radio-opaque for catheter positioning via X-ray
- Length markings



Movable Fixation Clips

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

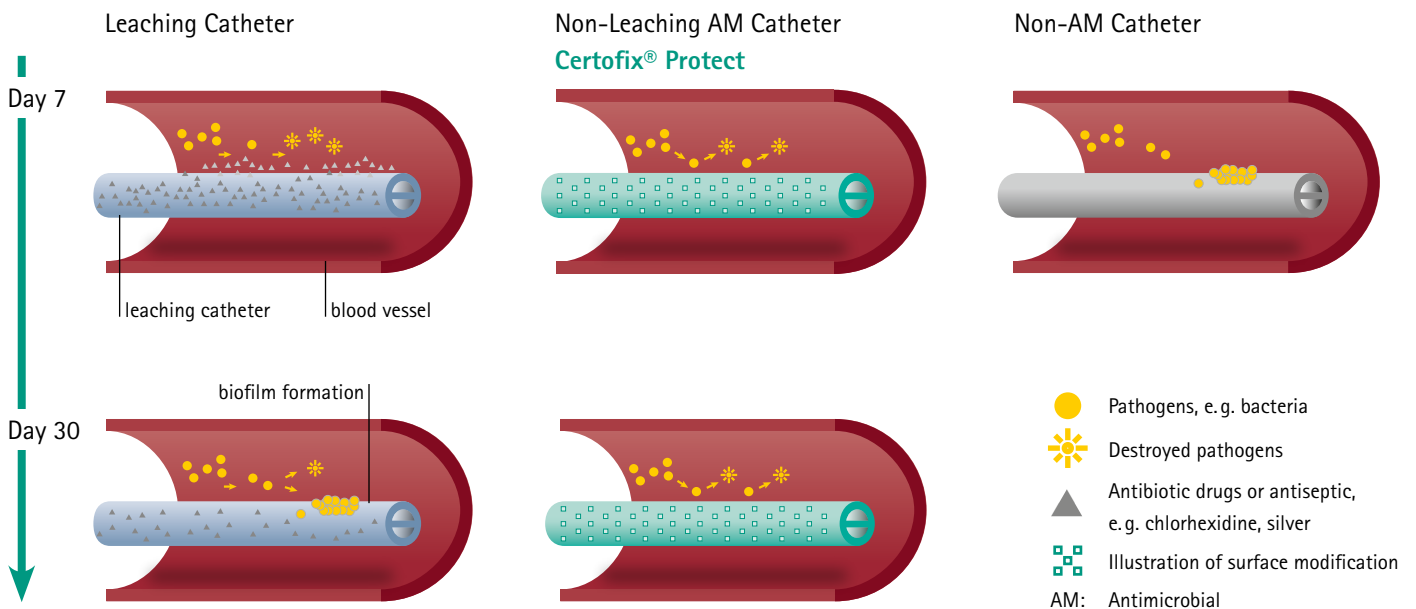


Soft tip

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

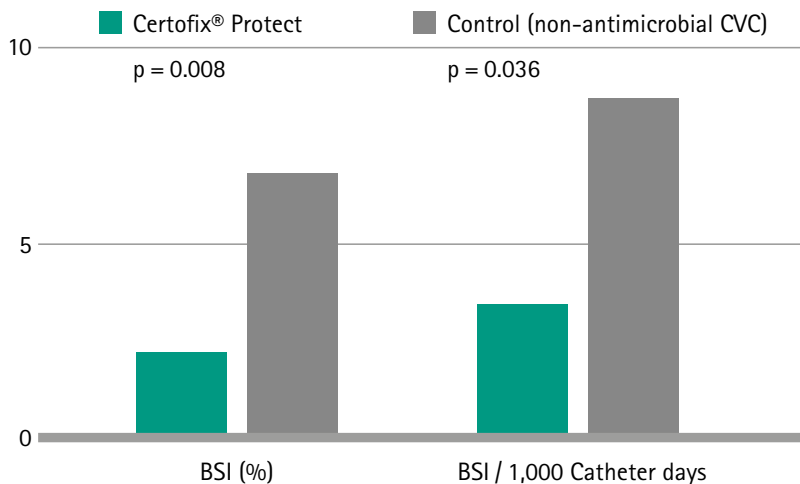
* CLABSI: Central line-associated bloodstream infections

** CRBSI: Catheter-related 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 (n=616):

- 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 therapy⁶



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 infection⁹

The same test results were obtained for:

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

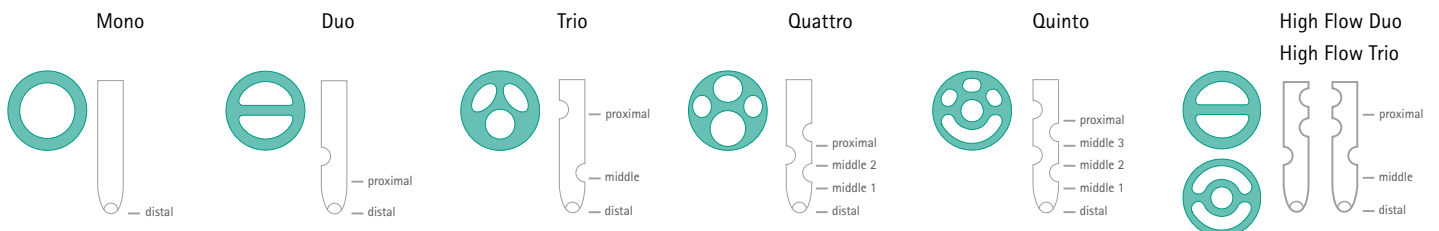


Certofix® Set Configurations

| Set Configuration | Catheter Variants (only one catheter in each set) | | | | | | |
|---------------------------|---|-----|------|---------|--------|--------|---------|
| | Mono | Duo | Trio | Quattro | Quinto | HF Duo | HF Trio |
| Certofix® Standard S Sets | ■ | ■ | ■ | | ■ | | |
| Certofix® Standard V Sets | ■ | ■ | ■ | ■ | ■ | | |
| Certofix® Protect | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Certofix® High Flow | | | | | | ■ | ■ |
| Certofix® Safety | ■ | ■ | ■ | ■ | ■ | | |
| Certofix® Econoline | ■ | ■ | ■ | | | | |
| Certofix® Paed | ■ | ■ | ■ | | | | |

HF: high flow

Lumen Variants of Certofix® Catheters



Accessories

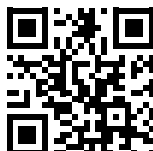
| Introducer Needle | Nitinol Guidewire | Syringe | Scalpel | Dilator | ECG Cable | Needle-free connector | Non-sutured Fixation |
|---------------------|-------------------|---------|---------|---------|-----------|--|----------------------|
| Seldinger | ■ | ■ | ■* | ■ | ■ | Safsite®* | |
| Valve | ■ | ■ | ■* | ■ | ■ | Safsite®* | |
| Valve | ■ | ■ | ■* | ■ | ■ | Safsite®* | |
| Valve/ Seldinger | ■ | ■ | ■ | ■ | ■ | Safsite® | |
| Safety Seldinger | ■ | ■ | ■** | ■ | ■ | Safsite®* | |
| Seldinger | ■ | | | ■ | | Instopper | |
| Seldinger | ■ | ■ | ■ | ■* | ■ | Safsite® or Discofix® 3-way stopcock | Statlock |

* Not in sets with Mono Lumen CVC

** Safety Scalpel



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

Product Specifications

Certofix® Standard Sets

| Name | Catheter** | | | | | | Introducer Needle | |
|---------------------------|------------|-----------|-------------|---------------------------------|---|-------------------------------------|-------------------|-------|
| 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 | Filling Volume (ml) D/M1/M2/M3/P | Type | Gauge |
| Mono V 220 | 1 | 4 | 20 | 18 | 18 | 0.315 | V | 20 |
| Mono V 315 | 1 | 5 | 15 | 16 | 60 | 0.370 | V | 18 |
| Mono V 320 | 1 | 5 | 20 | 16 | 52 | 0.415 | V | 18 |
| Mono V 330 | 1 | 5 | 30 | 16 | 40 | 0.510 | V | 18 |
| Mono V 415 | 1 | 6 | 15 | 14 | 90 | 0.455 | V | 18 |
| Mono V 420 | 1 | 6 | 20 | 14 | 80 | 0.535 | V | 18 |
| Mono V 430 | 1 | 6 | 30 | 14 | 75 | 0.690 | V | 18 |
| Duo V 715 | 2 | 7 | 15 | 16/16 | 60/50 | 0.400/0.335 | V | 18 |
| Duo V 720 | 2 | 7 | 20 | 16/16 | 55/45 | 0.455/0.380 | V | 18 |
| Duo V 730 | 2 | 7 | 30 | 16/16 | 52/37 | 0.570/0.470 | V | 18 |
| Trio V 715 | 3 | 7 | 15 | 16/18/18 | 50/28/28 | 0.340/0.205/0.195 | V | 18 |
| Trio V 720 | 3 | 7 | 20 | 16/18/18 | 46/22/22 | 0.380/0.215/0.205 | V | 18 |
| Trio V 730 | 3 | 7 | 30 | 16/18/18 | 38/18/18 | 0.460/0.240/0.230 | V | 18 |
| Quattro V 815 | 4 | 8 | 15 | 14/18/18/16 | 50/20/20/50 | 0.435/0.205/0.260/0.255 | V | 18 |
| Quattro V 820 | 4 | 8 | 20 | 14/18/18/16 | 40/15/15/40 | 0.500/0.215/0.280/0.295 | V | 18 |
| Quattro V 830 | 4 | 8 | 30 | 14/18/18/16 | 35/10/10/35 | 0.635/0.240/0.325/0.380 | V | 18 |
| Quinto V 1215 | 5 | 12 | 15 | 16/18/18/18/12 | 65/32/32/30/225 | 0.445/0.280/0.280/0.315/1.080 | V | 18 |
| Quinto V 1220 | 5 | 12 | 20 | 16/18/18/18/12 | 55/28/28/28/185 | 0.515/0.300/0.300/0.340/1.105 | V | 18 |

| Name | Catheter** | | | | | | Introducer Needle | |
|---------------------------|------------|-----------|-------------|---------------------------------|---|-------------------------------------|-------------------|-------|
| 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 | Filling Volume (ml) D/M1/M2/M3/P | Type | Gauge |
| Mono S 215 | 1 | 4 | 15 | 18 | 23 | 0.300 | S | 20 |
| Mono S 220 | 1 | 4 | 20 | 18 | 18 | 0.315 | S | 20 |
| Mono S 315 | 1 | 5 | 15 | 16 | 60 | 0.370 | S | 18 |
| Mono S 320 | 1 | 5 | 20 | 16 | 52 | 0.415 | S | 18 |
| Mono S 330 | 1 | 5 | 30 | 16 | 40 | 0.510 | S | 18 |
| Mono S 415 | 1 | 6 | 15 | 14 | 90 | 0.455 | S | 18 |
| Mono S 420 | 1 | 6 | 20 | 14 | 80 | 0.535 | S | 18 |
| Mono S 430 | 1 | 6 | 30 | 14 | 75 | 0.690 | S | 18 |
| Duo S 715 | 2 | 7 | 15 | 16/16 | 60/50 | 0.400/0.335 | S | 18 |
| Duo S 720 | 2 | 7 | 20 | 16/16 | 55/45 | 0.455/0.380 | S | 18 |
| Duo S 730 | 2 | 7 | 30 | 16/16 | 52/37 | 0.570/0.470 | S | 18 |
| Trio S 715 | 3 | 7 | 15 | 16/18/18 | 50/28/28 | 0.340/0.205/0.195 | S | 18 |
| Trio S 720 | 3 | 7 | 20 | 16/18/18 | 46/22/22 | 0.380/0.215/0.205 | S | 18 |
| Trio S 730 | 3 | 7 | 30 | 16/18/18 | 38/18/18 | 0.460/0.240/0.230 | S | 18 |
| Quinto S 1220 | 5 | 12 | 20 | 16/18/18/18/12 | 55/28/28/28/185 | 0.515/0.300/0.300/0.340/1.105 | S | 18 |

| Guidewire*** | | Other Accessories | | | | | Article No.* (REF) |
|----------------|-----------|-------------------|---------|-----------------|-------------------------|-----------------------------------|-----------------------|
| Length (cm) | Ø (mm) | Syringe | Scalpel | Dilator (Fr) | Connection cable ECG | Needle Free Connector Safsite® | |
| 50 | 0.63 | 5 ml | - | 5 | 1x | - | 4160215 |
| 50 | 0.89 | 5 ml | - | 6 | 1x | - | 4160231 |
| 50 | 0.89 | 5 ml | - | 6 | 1x | - | 4160266 |
| 70 | 0.89 | 5 ml | - | 6 | 1x | - | 4160290 |
| 50 | 0.89 | 5 ml | - | 8 | 1x | - | 4160517 |
| 50 | 0.89 | 5 ml | - | 8 | 1x | - | 4160320 |
| 70 | 0.89 | 5 ml | - | 8 | 1x | - | 4160789 |
| 50 | 0.89 | 5 ml | 1x | 8 | 1x | 2x | 4166159 |
| 50 | 0.89 | 5 ml | 1x | 8 | 1x | 2x | 4161211 |
| 70 | 0.89 | 5 ml | 1x | 8 | 1x | 2x | 4161319 |
| 50 | 0.89 | 5 ml | 1x | 8 | 1x | 3x | 4162153 |
| 50 | 0.89 | 5 ml | 1x | 8 | 1x | 3x | 4163214 |
| 70 | 0.89 | 5 ml | 1x | 8 | 1x | 3x | 4163311 |
| 50 | 0.89 | 5 ml | 1x | 9 | 1x | 4x | 4167767 |
| 50 | 0.89 | 5 ml | 1x | 9 | 1x | 4x | 4167775 |
| 70 | 0.89 | 5 ml | 1x | 9 | 1x | 4x | 4167783 |
| 50 | 0.89 | 5 ml | 1x | 12 | 1x | 5x | 4166841 |
| 50 | 0.89 | 5 ml | 1x | 12 | 1x | 5x | 4166868 |

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

| Guidewire*** | | Other Accessories | | | | | Article No.* (REF) |
|----------------|-----------|-------------------|---------|-----------------|-------------------------|-----------------------------------|-----------------------|
| Length (cm) | Ø (mm) | Syringe | Scalpel | Dilator (Fr) | Connection cable ECG | Needle Free Connector Safsite® | |
| 50 | 0.63 | 5 ml | - | 5 | 1x | - | 4160185 |
| 50 | 0.63 | 5 ml | - | 5 | 1x | - | 4160207 |
| 50 | 0.89 | 5 ml | - | 6 | 1x | - | 4160223 |
| 50 | 0.89 | 5 ml | - | 6 | 1x | - | 4160258 |
| 70 | 0.89 | 5 ml | - | 6 | 1x | - | 4160282 |
| 50 | 0.89 | 5 ml | - | 8 | 1x | - | 4160509 |
| 50 | 0.89 | 5 ml | - | 8 | 1x | - | 4160304 |
| 70 | 0.89 | 5 ml | - | 8 | 1x | - | 4160762 |
| 50 | 0.89 | 5 ml | 1x | 8 | 1x | 2x | 4164158 |
| 50 | 0.89 | 5 ml | 1x | 8 | 1x | 2x | 4167385 |
| 70 | 0.89 | 5 ml | 1x | 8 | 1x | 2x | 4167394 |
| 50 | 0.89 | 5 ml | 1x | 8 | 1x | 3x | 4161159 |
| 50 | 0.89 | 5 ml | 1x | 8 | 1x | 3x | 4167408 |
| 70 | 0.89 | 5 ml | 1x | 8 | 1x | 3x | 4163306 |
| 50 | 0.89 | 5 ml | 1x | 12 | 1x | 5x | 4166852 |

Product Specifications

Certifix® Protect

| Name | Catheter** | | | | | | Introducer Needle | |
|------------------|------------|-----------|-------------|---------------------------------|---|-------------------------------------|-------------------|-------|
| | Lumen | Size (Fr) | Length (cm) | Lumen Ø (Gauge) D/M1/M2/M3/P | min. Flow Rate (ml/min) D/M1/M2/M3/P | Filling Volume (ml) D/M1/M2/M3/P | Type | Gauge |
| Mono V 320 P | 1 | 5 | 20 | 16 | 52 | 0.415 | V | 18 |
| Mono V 330 P | 1 | 5 | 30 | 16 | 40 | 0.510 | V | 18 |
| Mono V 420 P | 1 | 6 | 20 | 14 | 80 | 0.535 | V | 18 |
| Mono V 430 P | 1 | 6 | 30 | 14 | 75 | 0.690 | V | 18 |
| Duo V 715 P | 2 | 7 | 15 | 16/16 | 60/50 | 0.400/0.335 | V | 18 |
| Duo V 720 P | 2 | 7 | 20 | 16/16 | 55/45 | 0.455/0.380 | V | 18 |
| Duo V 730 P | 2 | 7 | 30 | 16/16 | 52/37 | 0.570/0.470 | V | 18 |
| Duo HF V 720 P | 2 | 7 | 20 | 14/18 | 100/27 | 0.555/0.276 | V | 18 |
| Trio V 715 P | 3 | 7 | 15 | 16/18/18 | 50/28/28 | 0.340/0.205/0.195 | V | 18 |
| Trio V 720 P | 3 | 7 | 20 | 16/18/18 | 46/22/22 | 0.380/0.215/0.205 | V | 18 |
| Trio V 730 P | 3 | 7 | 30 | 16/18/18 | 38/18/18 | 0.460/0.240/0.230 | V | 18 |
| Trio HF V 1220 P | 3 | 12 | 20 | 16/12/12 | 55/165/165 | 0.470/1.410/1.401 | V | 18 |
| Quattro V 815 P | 4 | 8 | 15 | 14/18/18/16 | 50/20/20/50 | 0.435/0.205/0.260/0.255 | V | 18 |
| Quattro V 820 P | 4 | 8 | 20 | 14/18/18/16 | 40/15/15/40 | 0.500/0.215/0.280/0.295 | V | 18 |
| Quattro V 830 P | 4 | 8 | 30 | 14/18/18/16 | 35/10/10/35 | 0.635/0.240/0.325/0.380 | V | 18 |
| Quinto V 1220 P | 5 | 12 | 20 | 16/18/18/18/12 | 55/28/28/28/185 | 0.515/0.300/0.300/0.340/1.105 | V | 18 |

Certifix® High Flow

| Name | Catheter** | | | | | | Introducer Needle | |
|--------------------------|------------|-----------|-------------|--------------------------|----------------------------------|------------------------------|-------------------|-------|
| | Lumen | Size (Fr) | Length (cm) | Lumen Ø (Gauge) D/M/P | min. Flow Rate (ml/min) D/M/P | Filling Volume (ml) D/M/P | Type | Gauge |
| Duo HF V 715 | 2 | 7 | 15 | 14/18 | 105/42 | 0.480/0.245 | V | 18 |
| Duo HF V 720 | 2 | 7 | 20 | 14/18 | 100/27 | 0.555/0.275 | V | 18 |
| Duo HF S 720 | 2 | 7 | 20 | 14/18 | 100/27 | 0.555/0.275 | S | 18 |
| Duo HF V 920 | 2 | 9 | 20 | 13/13 | 95/120 | 1.220/1.105 | V | 18 |
| Duo HF V 1215 | 2 | 12 | 15 | 11/11 | 260/260 | 1.425/1.335 | V | 18 |
| Duo HF V 1220 | 2 | 12 | 20 | 11/11 | 230/230 | 1.580/1.490 | V | 18 |
| Trio HF V 1215 | 3 | 12 | 15 | 16/12/12 | 65/225/225 | 0.415/1.260/1.170 | V | 18 |
| Trio HF S 1215 | 3 | 12 | 15 | 16/12/12 | 65/225/225 | 0.415/1.260/1.170 | S | 18 |
| Trio HF V 1220 | 3 | 12 | 20 | 16/12/12 | 55/165/165 | 0.470/1.410/1.400 | V | 18 |
| Trio HF S 1220 | 3 | 12 | 20 | 16/12/12 | 55/165/165 | 0.470/1.410/1.400 | S | 18 |
| Protect Duo HF V 720 P | 2 | 7 | 20 | 14/18 | 100/27 | 0.555/0.276 | V | 18 |
| Protect Trio HF V 1220 P | 3 | 12 | 20 | 16/12/12 | 55/165/165 | 0.470/1.410/1.401 | V | 18 |

| Guidewire *** | | Other Accessories | | | | | Article No.* (REF) |
|---------------|--------|-------------------|---------|--------------|----------------------|--------------------------------|-----------------------|
| Length (cm) | Ø (mm) | Syringe | Scalpel | Dilator (Fr) | Connection cable ECG | Needle Free Connector Safsite® | |
| 50 | 0.89 | 5 ml | - | 6 | 1x | - | 4160266P |
| 70 | 0.89 | 5 ml | - | 6 | 1x | - | 4160290P |
| 50 | 0.89 | 5 ml | - | 8 | 1x | - | 4160320P |
| 70 | 0.89 | 5 ml | - | 8 | 1x | - | 4160789P |
| 50 | 0.89 | 5 ml | 1x | 8 | 1x | 2x | 4166159P |
| 50 | 0.89 | 5 ml | 1x | 8 | 1x | 2x | 4161211P |
| 70 | 0.89 | 5 ml | 1x | 8 | 1x | 2x | 4161319P |
| 50 | 0.89 | 5 ml | 1x | 8 | 1x | 2x | 4168534P |
| 50 | 0.89 | 5 ml | 1x | 8 | 1x | 3x | 4162153P |
| 50 | 0.89 | 5 ml | 1x | 8 | 1x | 3x | 4163214P |
| 70 | 0.89 | 5 ml | 1x | 8 | 1x | 3x | 4163311P |
| 50 | 0.89 | 5 ml | 1x | 12 | 1x | 3x | 4160622P |
| 50 | 0.89 | 5 ml | 1x | 9 | 1x | 4x | 4167767P |
| 50 | 0.89 | 5 ml | 1x | 9 | 1x | 4x | 4167775P |
| 70 | 0.89 | 5 ml | 1x | 9 | 1x | 4x | 4167783P |
| 50 | 0.89 | 5 ml | 1x | 12 | 1x | 5x | 4166868P |

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

| Guidewire *** | | Other Accessories | | | | | Article No.* (REF) |
|---------------|--------|-------------------|---------|--------------|----------------------|--------------------------------|-----------------------|
| Length (cm) | Ø (mm) | Syringe | Scalpel | Dilator (Fr) | Connection cable ECG | Needle Free Connector Safsite® | |
| 50 | 0.89 | 5 ml | 1x | 8 | 1x | 2x | 4168518 |
| 50 | 0.89 | 5 ml | 1x | 8 | 1x | 2x | 4168534 |
| 50 | 0.89 | 5 ml | 1x | 8 | 1x | 2x | 4168528 |
| 50 | 0.89 | 5 ml | 1x | 9 | 1x | 2x | 4167511 |
| 50 | 0.89 | 5 ml | 1x | 12 | 1x | 2x | 4167538 |
| 50 | 0.89 | 5 ml | 1x | 12 | 1x | 2x | 4167546 |
| 50 | 0.89 | 5 ml | 1x | 12 | 1x | 3x | 4160614 |
| 50 | 0.89 | 5 ml | 1x | 12 | 1x | 3x | 4160578 |
| 50 | 0.89 | 5 ml | 1x | 12 | 1x | 3x | 4160622 |
| 50 | 0.89 | 5 ml | 1x | 12 | 1x | 3x | 4160586 |
| 50 | 0.89 | 5 ml | 1x | 8 | 1x | 2x | 4168534P |
| 50 | 0.89 | 5 ml | 1x | 12 | 1x | 3x | 4160622P |

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

Product Specifications

Certofix® Safety

| Name | Catheter** | | | | | | Introducer Needle | |
|------------------|------------|-----------|-------------|---------------------------------|---|-------------------------------------|-------------------|-------|
| 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 | Filling Volume (ml) D/M1/M2/M3/P | Type | Gauge |
| Mono S 320 | 1 | 5 | 20 | 16 | 52 | 0.415 | Safety | 18 |
| Mono S 330 | 1 | 5 | 30 | 16 | 40 | 0.510 | Safety | 18 |
| Duo S 720 | 2 | 7 | 20 | 16/16 | 55/45 | 0.455/0.380 | Safety | 18 |
| Duo S 730 | 2 | 7 | 30 | 16/16 | 52/37 | 0.570/0.470 | Safety | 18 |
| Trio S 720 | 3 | 7 | 20 | 16/18/18 | 46/22/22 | 0.380/0.215/0.205 | Safety | 18 |
| Trio S 730 | 3 | 7 | 30 | 16/18/18 | 38/18/18 | 0.460/0.240/0.230 | Safety | 18 |
| Quattro S 820 | 4 | 8 | 20 | 14/18/18/16 | 40/15/15/40 | 0.500/0.215/0.280/0.295 | Safety | 18 |
| Quinto S 1220 | 5 | 12 | 20 | 16/18/18/18/12 | 55/28/28/28/185 | 0.515/0.300/0.300/0.340/1.105 | Safety | 18 |

Certofix® Paed

| Name | Catheter*** | | | | | | Introducer Needle | |
|----------------------------|-------------|-----------|-------------|--------------------------|----------------------------------|------------------------------|-------------------|-------|
| Certofix® Paed | Lumen | Size (Fr) | Length (cm) | Lumen Ø (Gauge) D/M/P | min. Flow Rate (ml/min) D/M/P | Filling Volume (ml) D/M/P | Type | Gauge |
| Mono S 110 | 1 | 3 | 10 | 22 | 15 | 0.100 | S | 21 |
| Duo S 408 | 2 | 4 | 8 | 22/22 | 18/18 | 0.235/0.205 | S | 21 |
| Duo S 413 | 2 | 4 | 13 | 22/22 | 10/10 | 0.255/0.225 | S | 21 |
| Duo S 420 | 2 | 4 | 20 | 22/22 | 9/9 | 0.275/0.250 | S | 21 |
| Duo S 508 | 2 | 5 | 8 | 18/20 | 30/15 | 0.250/0.205 | S | 21 |
| Duo S 513 | 2 | 5 | 13 | 18/20 | 22/11 | 0.270/0.225 | S | 21 |
| Duo S 520 | 2 | 5 | 20 | 18/20 | 18/9 | 0.300/0.250 | S | 21 |
| Trio S 508 | 3 | 5 | 8 | 20/22/22 | 30/15/15 | 0.235/0.185/0.180 | S | 21 |
| Trio S 513 | 3 | 5 | 13 | 20/22/22 | 29/10/10 | 0.260/0.200/0.195 | S | 21 |
| Trio S 520 | 3 | 5 | 20 | 20/22/22 | 18/6/6 | 0.290/0.215/0.210 | S | 21 |

| Guidewire *** | | Other Accessories | | | | | Article No.* (REF) |
|---------------|--------|-------------------|---------|--------------|----------------------|--------------------------------|-----------------------|
| Length (cm) | Ø (mm) | Syringe | Scalpel | Dilator (Fr) | Connection cable ECG | Needle Free Connector Safsite® | |
| 50 | 0.89 | 5 ml | Safety | 6 | 1x | - | 4160258S |
| 70 | 0.89 | 5 ml | Safety | 6 | 1x | - | 4160282S |
| 50 | 0.89 | 5 ml | Safety | 8 | 1x | 2x | 4167385S |
| 70 | 0.89 | 5 ml | Safety | 8 | 1x | 2x | 4167394S |
| 50 | 0.89 | 5 ml | Safety | 8 | 1x | 3x | 4167408S |
| 70 | 0.89 | 5 ml | Safety | 8 | 1x | 3x | 4163306S |
| 50 | 0.89 | 5 ml | Safety | 9 | 1x | 4x | 4167775S |
| 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

| Guidewire **** | | Other Accessories | | | | | Article No.* (REF) | |
|----------------|--------|-------------------|---------|--------------|----------------------|--|-----------------------|----------------------------|
| Length (cm) | Ø (mm) | Syringe | Scalpel | Dilator (Fr) | Connection cable ECG | Needle Free Connector Safsite® | | Statlock catheter fixation |
| 25 | 0.46 | 3 ml | 1x | - | 1x | (instead of Safsite®) 1x Infusion extension line 1x Discifix® 3-way stopcock | 1x | 4160177** |
| 50 | 0.46 | 5 ml | 1x | 5 | 1x | 2x | 1x | 4166906 |
| 50 | 0.46 | 5 ml | 1x | 5 | 1x | 2x | 1x | 4166922 |
| 50 | 0.46 | 5 ml | 1x | 5 | 1x | 2x | 1x | 4166949 |
| 50 | 0.46 | 5 ml | 1x | 6 | 1x | 2x | 1x | 4167112 |
| 50 | 0.46 | 5 ml | 1x | 6 | 1x | 2x | 1x | 4167139 |
| 50 | 0.46 | 5 ml | 1x | 6 | 1x | 2x | 1x | 4167155 |
| 50 | 0.46 | 5 ml | 1x | 6 | 1x | 3x | 1x | 4167228 |
| 50 | 0.46 | 5 ml | 1x | 6 | 1x | 3x | 1x | 4167244 |
| 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 length markings and ECG marked

Product Specifications

Certofix® Econoline

| Name | Catheter** | | | | | | Introducer Needle | |
|---------------------|------------|-----------|-------------|-----------------------|-------------------------------|---------------------------|-------------------|-------|
| Certofix® Econoline | Lumen | Size (Fr) | Length (cm) | Lumen Ø (Gauge) D/M/P | min. Flow Rate (ml/min) D/M/P | Filling Volume (ml) D/M/P | Type | Gauge |
| Mono 215 | 1 | 4 | 15 | 18 | 16 | 0.175 | S | 20 |
| Mono 220 | 1 | 4 | 20 | 18 | 13 | 0.200 | S | 20 |
| Mono 315 | 1 | 5 | 15 | 16 | 55 | 0.300 | S | 18 |
| Mono 320 | 1 | 5 | 20 | 16 | 45 | 0.350 | S | 18 |
| Mono 330 | 1 | 5 | 30 | 16 | 40 | 0.445 | S | 18 |
| Mono 415 | 1 | 6 | 15 | 14 | 95 | 0.470 | S | 18 |
| Mono 420 | 1 | 6 | 20 | 14 | 85 | 0.550 | S | 18 |
| Mono 430 | 1 | 6 | 30 | 14 | 75 | 0.700 | S | 18 |
| Duo 715 | 2 | 7 | 15 | 16/16 | 60/50 | 0.400/0.335 | S | 18 |
| Duo 720 | 2 | 7 | 20 | 16/16 | 55/45 | 0.455/0.380 | S | 18 |
| Duo 730 | 2 | 7 | 30 | 16/16 | 52/37 | 0.570/0.470 | S | 18 |
| Trio 715 | 3 | 7 | 15 | 16/18/18 | 50/28/28 | 0.340/0.205/0.195 | S | 18 |
| Trio 720 | 3 | 7 | 20 | 16/18/18 | 46/22/22 | 0.380/0.215/0.205 | S | 18 |
| Trio 730 | 3 | 7 | 30 | 16/18/18 | 38/18/18 | 0.460/0.240/0.230 | S | 18 |

ACCESSORIES FOR CATHETER TIP POSITIONING WITH ECG

| Accessories | Description | Article No.* |
|---|---|--------------|
|  | Certodyn Universal® Adapter Electronic switch box (for adults) | 4150228 |
|  | Certodyn Universal® Adapter Paed Electronic switch box (for paediatric patient) | 4150724 |
|  | Alphacard® Syringe with electrode to Certodyn® universal adapter | U1800401 |

| Guidewire*** | | Other Accessories | | Article No.* (REF) |
|----------------|-----------|-------------------|-----------------|-----------------------|
| Length (cm) | Ø (mm) | IN- Stopper | Dilator (Fr) | |
| 50 | 0.63 | 1x | 5 | 4160185E |
| 50 | 0.63 | 1x | 5 | 4160207E |
| 50 | 0.89 | 1x | 6 | 4160223E |
| 50 | 0.89 | 1x | 6 | 4160258E |
| 70 | 0.89 | 1x | 6 | 4160282E |
| 50 | 0.89 | 1x | 8 | 4160509E |
| 50 | 0.89 | 1x | 8 | 4160304E |
| 70 | 0.89 | 1x | 8 | 4160762E |
| 50 | 0.89 | 2x | 8 | 4164156E |
| 50 | 0.89 | 2x | 8 | 4162200E |
| 70 | 0.89 | 2x | 8 | 4162307E |
| 50 | 0.89 | 3x | 8 | 4161157E |
| 50 | 0.89 | 3x | 8 | 4163206E |
| 70 | 0.89 | 3x | 8 | 4163303E |

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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