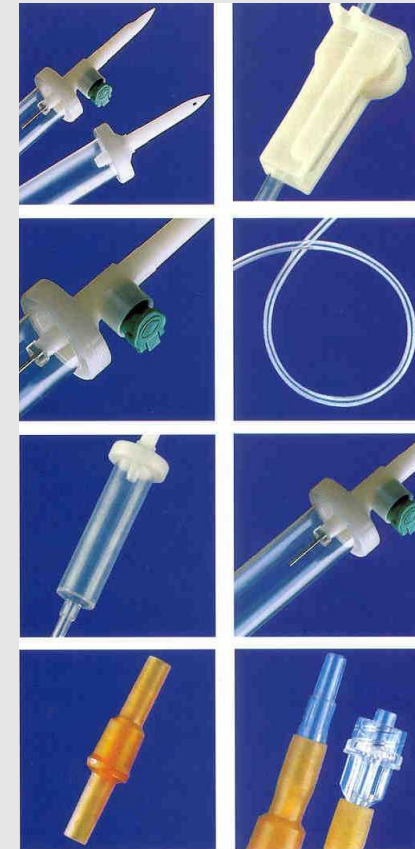
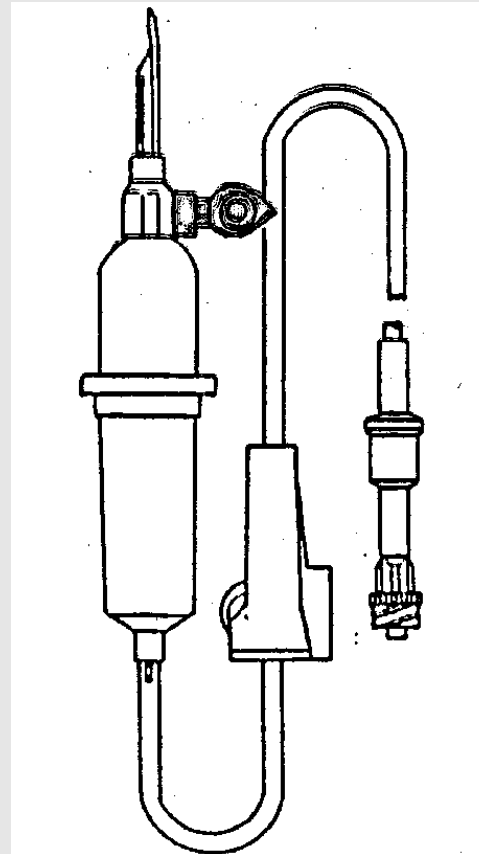


BU- 2 Product details

Components of an IV Set

- Piercing Pin/Spike
- Air Vent with Filter
- Drip Chamber
- Tubing
- Injection site
- Tubing connectors
- Clamps



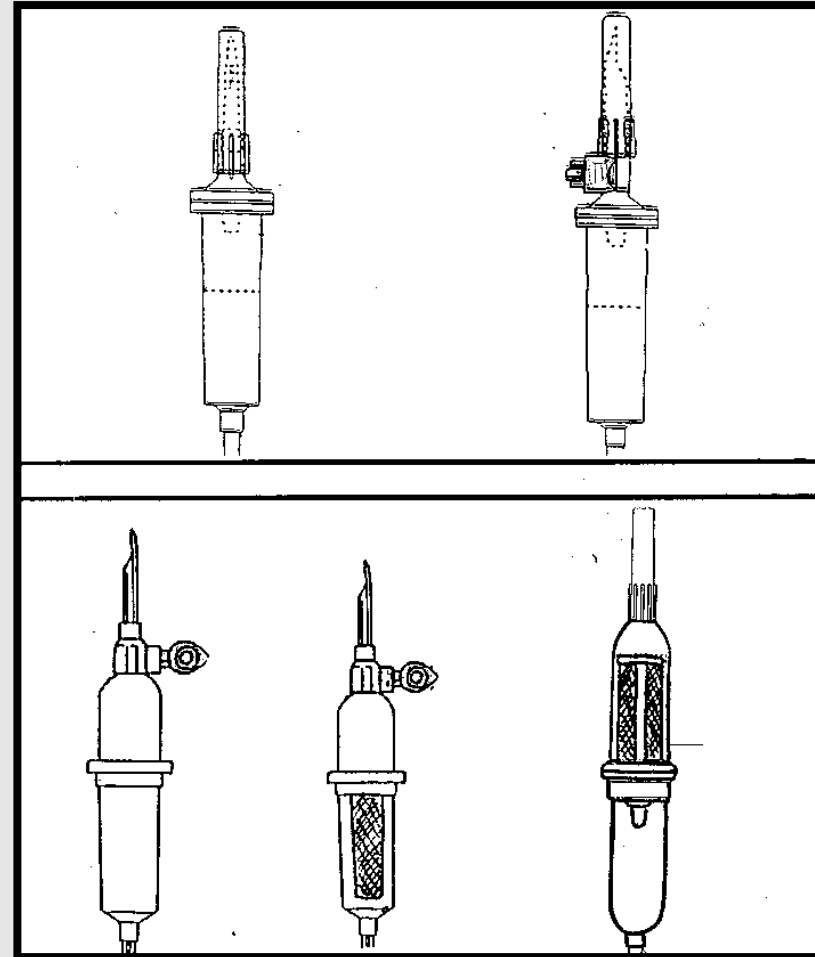
Spike



- Inserted through rubber stopper/plastic diaphragm
- Vented spike is used for plastic/semi-rigid plastic container
- Non-vented spike is used for plastic IV bags

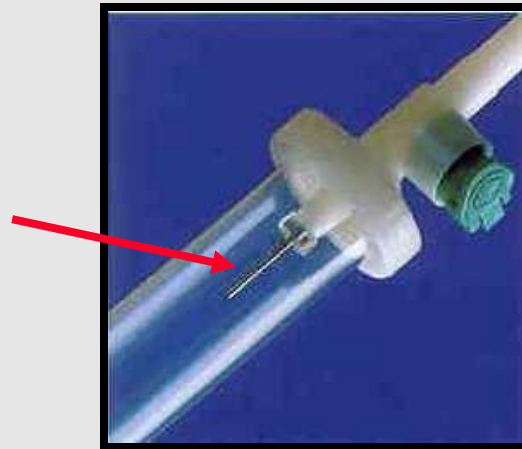
Drip Chamber

- Clear, hollow device attached to the spike on one end and to the IV tubing on the other
- **Used for priming the set and determining the flow/drip rate**
- Flexible bottom chamber for priming purposes
- Priming is to get rid of the air from the IV set and tubing
- Trapped air can travel to the lungs and cause death

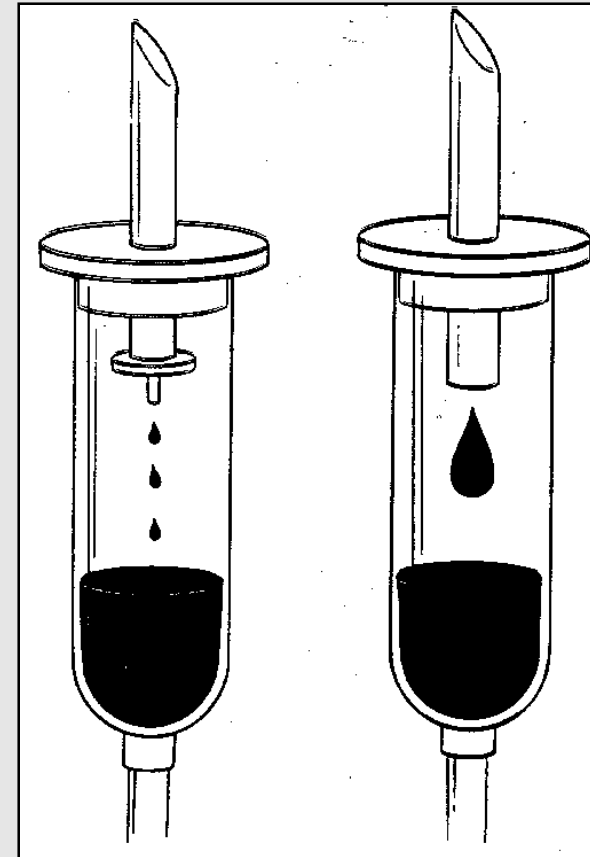


Types of drip chambers

A - Mini-drip
(Micro drip)
Chamber



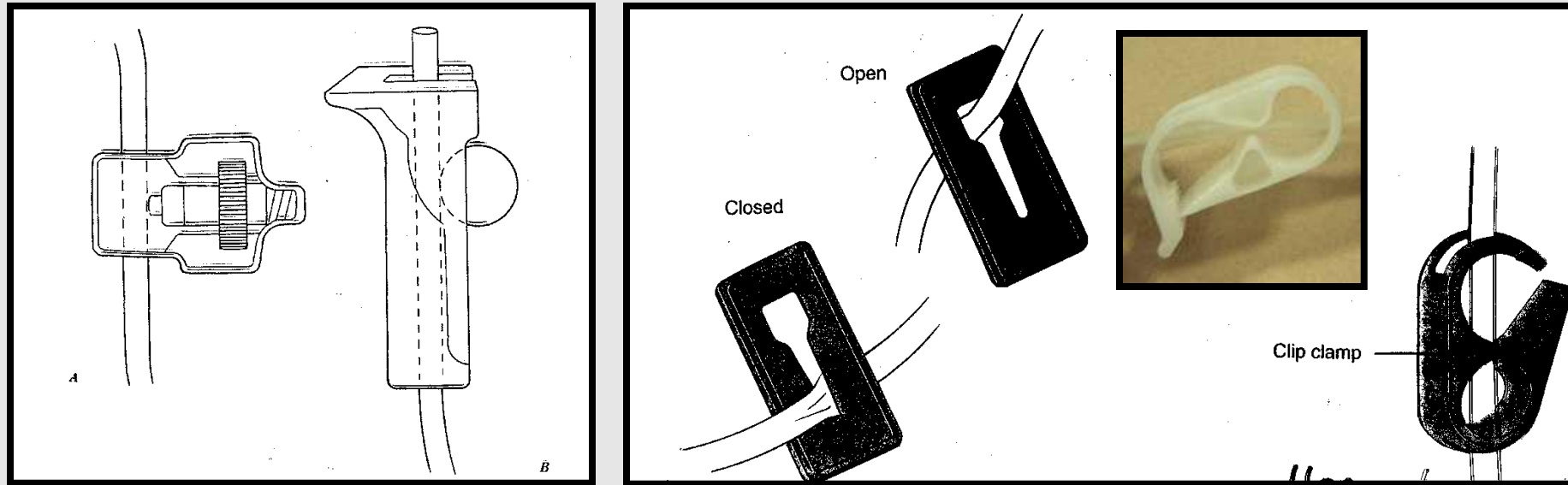
B - Macro drip
Chamber



Tubing

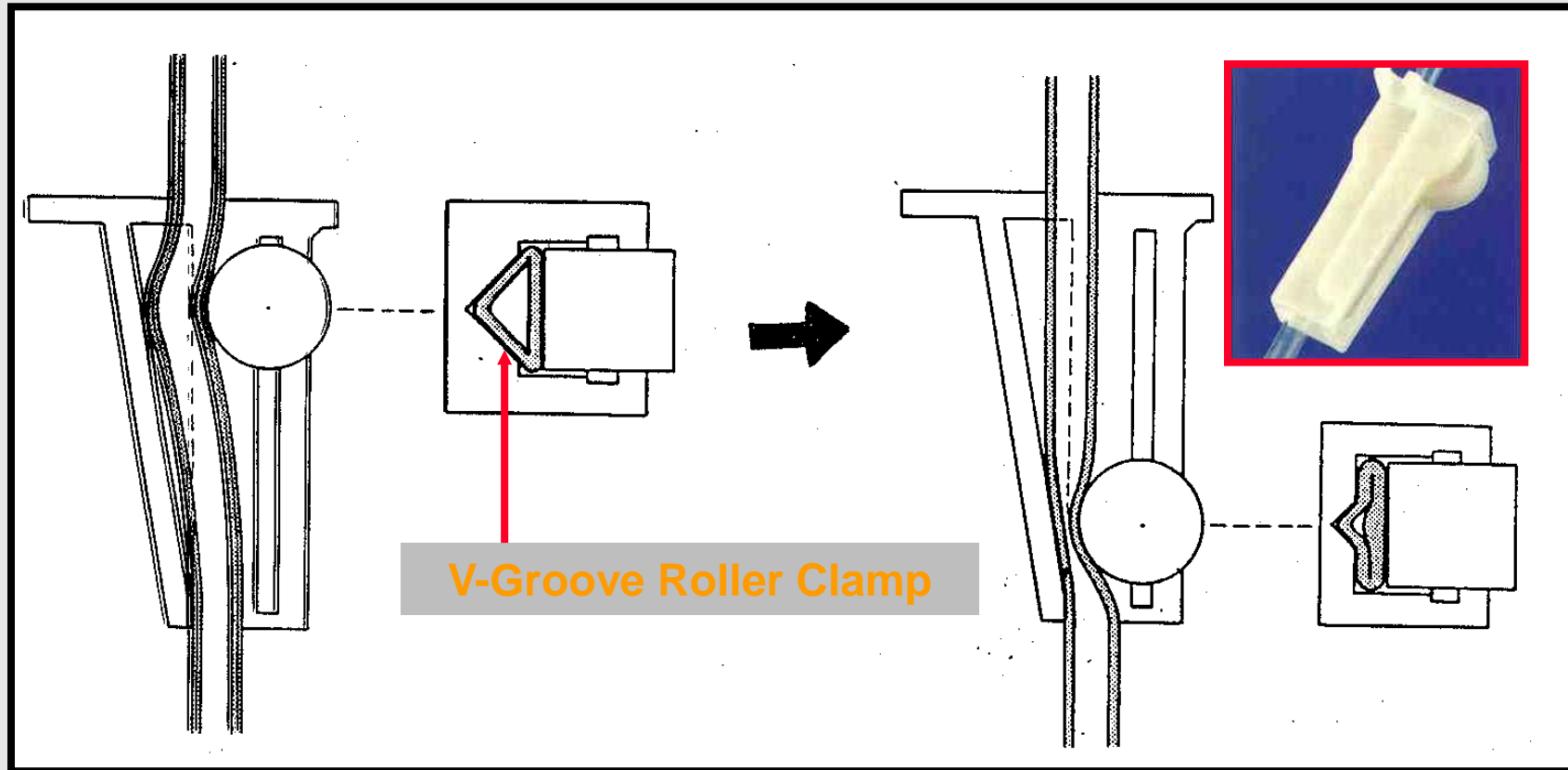
- To transfer fluid from the drip chamber to the catheter
- The tubing are made up of PVC material or Non -PVC material
- No common standard among the manufacturers
- **Std. bore tubing** - internal diameter, **3.1 mm** most commonly used
- **Small bore tubing** - internal diameter, **0.9 mm** important for critical drugs

Clamps

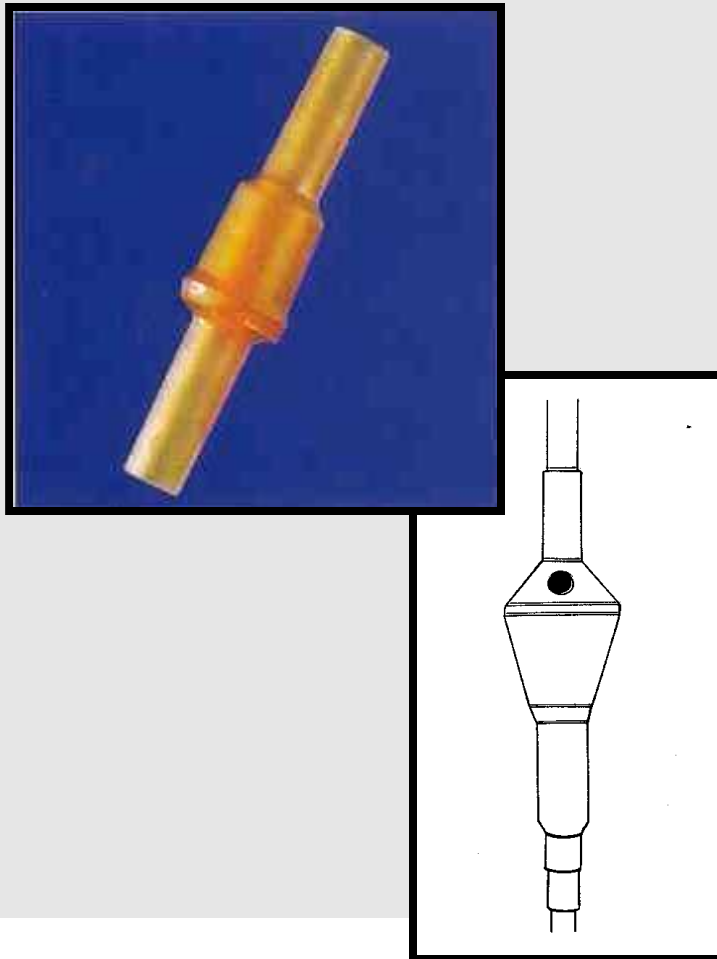


Roller clamp, Slide clamp and G-clamp / Hose clip

The Mechanics of Roller Clamp

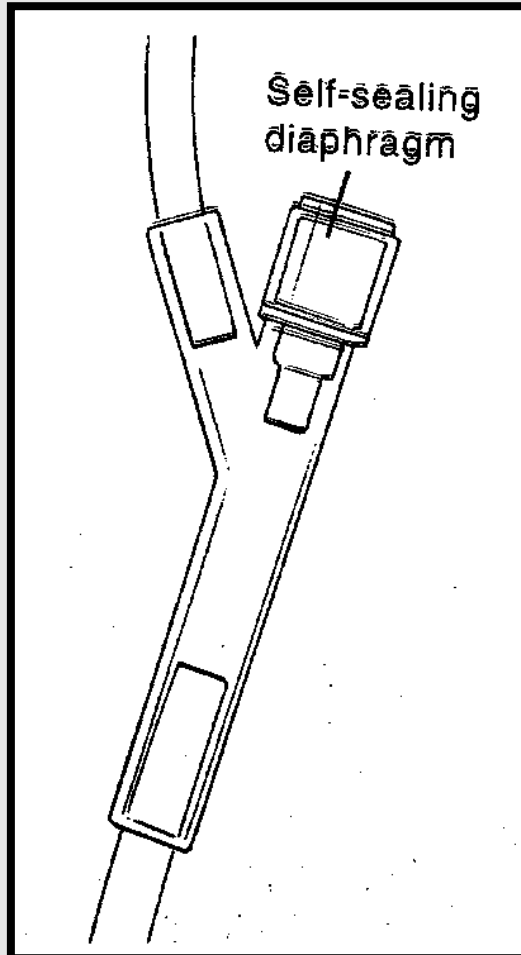


Latex Piece/Flashbulb



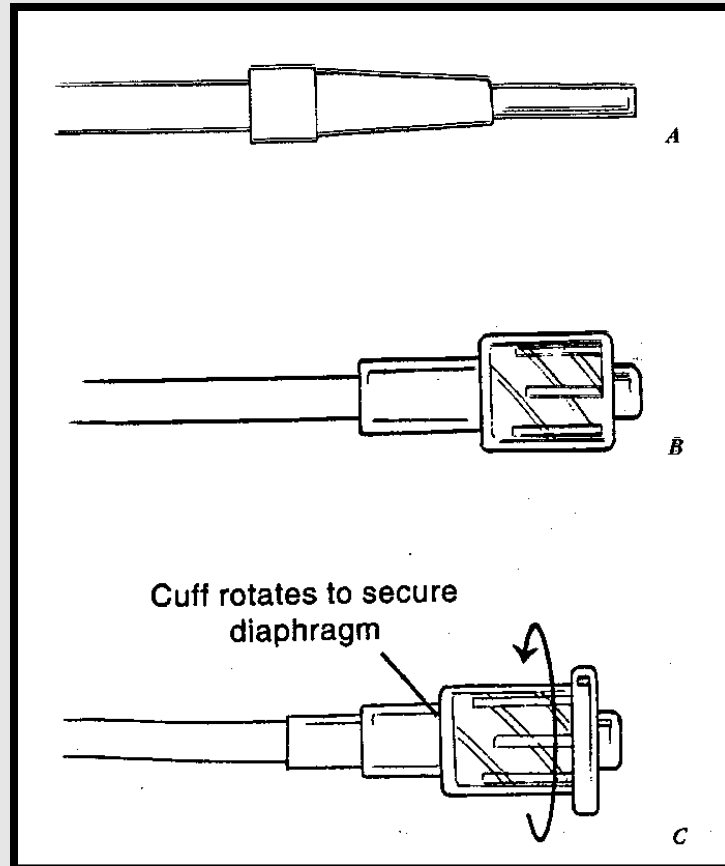
- Attached at the end of tubing before the connector
- Made of **self-sealing material**
- Access for IV push via needle stick

Y-Piece/Site



- Y-shaped connection on the IV line which allows the **simultaneous infusion or alternate administration of multiple drugs or fluids**
- One end is attached to the tubing on the primary IV set; the other is closed off with a **Safesite valve or an incorporated rubber injection site**
- More than 2 Y-sites may be on one set

Types of Connectors



- Luer slip

- Luer Lock

- Spin lock

Tubing Connectors

- Attached at the end of the tubing
- Luerslip - male luer connector which fits into the female luer connector, held in place by **friction**
- Luer lock - threads or ears of the connectors twist together, held in place by a **threaded collar on the male luer**
- Spin lock - similar to luer lock but more secure-fitting, **no twisting of tubing**

Flow Rate

- The rate at which the IV fluid is infused
- Determined by the **type of fluid, patient's age and physical condition, desired effect of the therapy**
- Factors - size/condition of vein, trauma to the vein, **fluid viscosity**, vasoconstriction, **size and length of tubing/catheter**, head height, obstruction/change in catheter

Priming

- To **remove air** - Replace IV fluid in the entire tubing before therapy
- **Priming volume** - Amount of drug which remains after the infusion is completed
- **Dosage to be adjusted** - Account for drug retained in the tubing

I.V ADMINISTRATION SETS

Ecofix Air[®] Premium Vented Gravity IV Infusion Set



Product Name	Article Code	Pack Size
Ecofix Air (Without Y connector)	4050116	100
Ecofix Air (With Y connector)	4050138	100

Ecofix Air[®] Premium Vented Gravity IV Infusion Set

Features and Benefit

❑ Spike with integrated bacteria tight air vent and closure clap

- ✓ Air vent prevents contamination of infusion solution.
- ✓ Effectively equalizes pressure when rigid infusion containers are used.
- ✓ The large grip facilitates insertion into the infusion container.

❑ Well-sized drip chamber

- ✓ The large transparent drip chamber lets the user ensure high fluid level settings that prevent air infusion.
- ✓ A standard equipped integrated 15 µm fluid filter protects the patient against particulate contamination.

❑ Elastomeric Flash bulb

- ✓ Flash bulb or convenient Y site make it easy to inject additional drugs. Made of highly elastic materials to guarantee instant resealing after puncture.

❑ Easy flow regulator, transparent flexible tubing

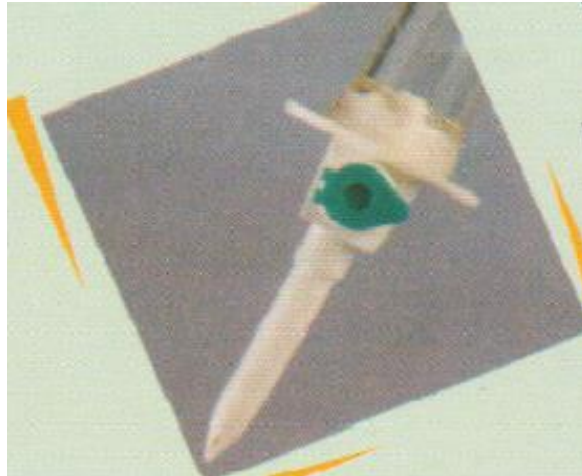
- ✓ Variable drip rate control is facilitated with the easy-to-use roller clamp.
- ✓ Flexible, highly transparent tubing allows safer and more reliable monitoring of IV infusions.



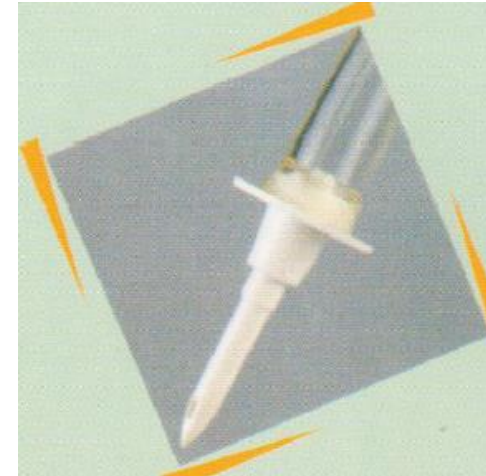
I.V ADMINISTRATION SETS

Oyster IV SET® Sterile, Non Pyrogenic, Non toxic

Oyster IV SET (Vented)



Oyster IV SET (Non Vented)

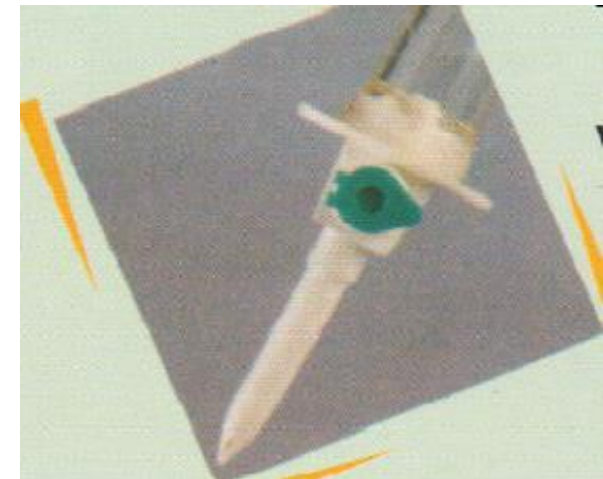
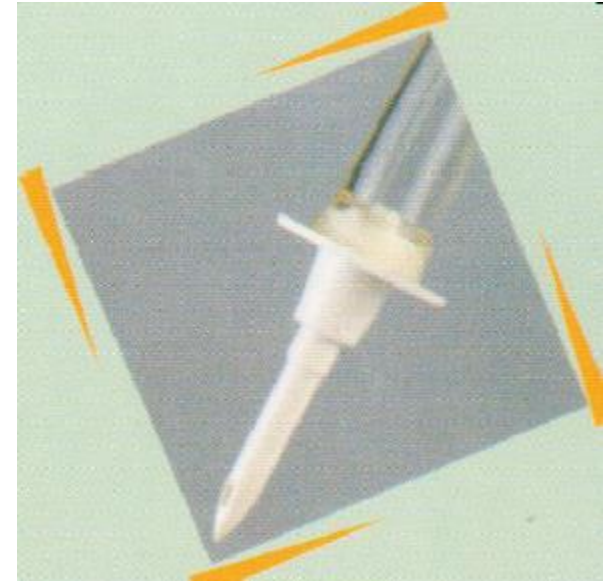


Product Name	Article Code	Pack Size
Oyster (Non-Vented Infusion Set)	575001NV-OYS	500
Oyster (Vented Infusion Set)	575001VV-OYS	500

Oyster IV SET® Sterile, Non Pyrogenic, Non toxic

Features and Benefit

- ❑ Infusion Set confirms to **ISO 8536-4 : 1998**
- ❑ **Sharp ABS Spike** for easy penetration
- ❑ **Specially designed grip** for better piercing & to prevent contamination
- ❑ **Clear transparent flexible drip chamber** for rapid adjustment of fluid level
- ❑ **Integrated air vent** with 0.2 micron bacteria filter
- ❑ **V shape roller clamp** groove allow easy and accurate adjustment of flow rate
- ❑ **Self sealing Latex injection bulb** for multiple injection
- ❑ **Available with luer slip**
- ❑ **Available in Macro -20drops/ml**



I.V ADMINISTRATION SETS

Dosifix®

Measure Volume Set

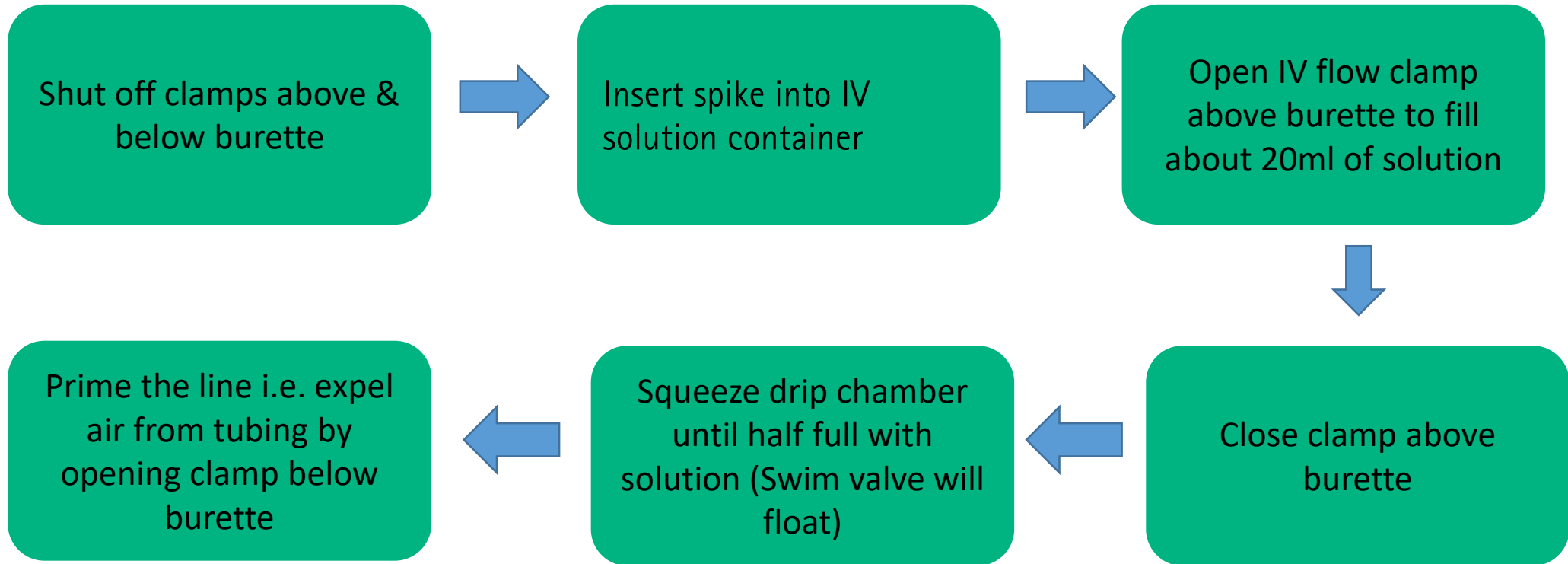


Product Name	Article Code	Pack Size
Dosifix® Luer Lock (150 ML)	4037014	25

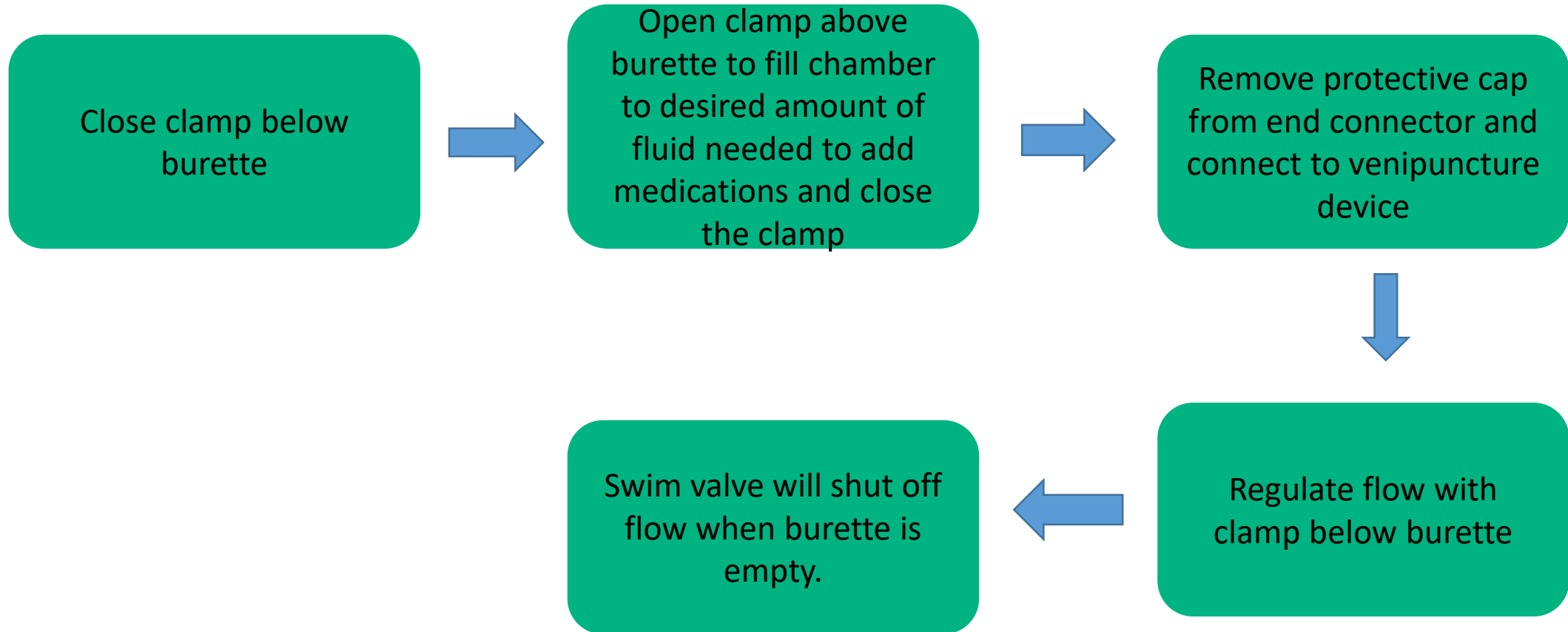
Features and Benefit

- Drip Chamber** made of Virgin Cellulose Acetate 100% Safe and non-PVC/DEHP set
- Automatic shut-off swim valve (Luminous green)** prevents air embolism and facilitate easy monitoring of fluid level
- Fluid filter** (15 micron) prevents any particulate contamination of fluid
- Connecting Y piece** -Self sealing connection for extra medication prevent contamination
- Luer-lock** -To prevent accidental disconnections, ensuring safe leakage-free connections

Procedure of using Dosifix[®]



Procedure of using Dosifix[®] Continued



5 key feature in Dosifix ?

- 1- Virgin Cellulose burette with 150 cm fluid volume.
- 2- 0.2 Micron Bacteria tight filter.
- 3- Double roller clamp.
- 4- Double latex free Injection Port.
- 5-. DEHP free tubing with Leur Lock

Target Audience

- 1- Pediatric Department (Pediatric ICU, Oncology, Pediatric Ward)
- 2- Nephrology department (Renal ICU, Nephrology ward, Nephrology HDU)
- 3- Medical ICU- for volume restricted patients

Communication Key points- **Dosifix**[®]

Sr. No	Feature	Benefits
1	Virgin Cellulose burette with 150 cm fluid volume	No drug interaction as it is made up of virgin material not from recycled material
2	150 cm fluid volume of burette	Large fluid volume provides ease in drug admixing
3	Bacteria tight filter Air vent.	Prevent air contamination if use open system bottle
4	Double roller clamp	To adjust the flow rate
5	Y- connection (Injection Port)	Makes bottle to patient close system, prevents HAI, less usage of 3 way stop cock.
6	DEHP free tubing with	Dosifix [®] is carcinogen free no drug interaction, can be used for Oncology
7	Lure Lock	Prevents accidental disconnection.

Blood Transfusion Sets

Sangofix® B

Premium Blood Transfusion Set

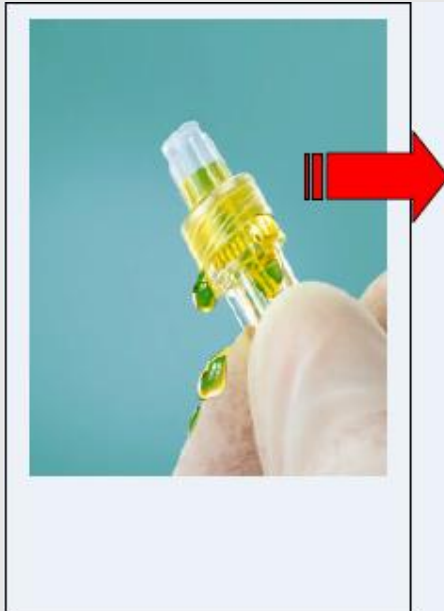


Prime Stop

Product Name	Article Code	Pack Size
SANGOFIX B, AD, 200 CM LL (NON VENTED)	4118219	100

Priming

To flush the IV tubing or removal of air from the tubing is called priming, it is mandatory to avoid air embolism.



Consequences of Priming:

- 2 hands required
- Time consuming
- Blood spills on the floor/bedding which leads to less hygiene & Contamination
- Blood is biggest source of infection growth

Sangofix B: Prime Stop

PrimeStop is a protection cap with integrated hydrophobic bacteria tight filter membrane which automates priming and ends messy dripping of blood

PrimeStop ensures that the line fills automatically. No more blood drips on hands and floor .

PrimeStop maintains a closed system until connected to the patient.

User benefits

- Automates priming
- Prevents „messy dripping“ of blood
- Forms a closed system bottle to patients
- Protects against Microbial Contamination



Sangofix® B Premium Blood Transfusion Set

Features and Benefit

- ISO spike** -Blunt spike to avoid perforation of bag and easily inserted into all type of standard blood container
- Soft, Elastic Tubing** guarantees a better flow rate, improves the drip constancy, facilitates an easier adjustment of the roller clamp & prevent kinking
- Filter Surface area**-10cm² with 200 micron filter
- Larger surface area** prevent the haemolysis of blood
- Flow control roller clamp** facilitates an easy & safe adjustment of flow rate.
-
- Parking space on roller clamp** prevents the leur connector from contamination

Sangofix® B – new advanced version with Prime Stop customers demanded it.... & we have it !!!



Sangofix® B – New Article code **4034228**

Sangofix® B – most advanced version of BT Set now available , with **Prime Stop** no messy spillage possibility

Tubing length – **180 cm** , as per the customers demand

Filter - 200 μ filter with 11cmsq. filter area

Spin Lock connections – for better grip & avoiding contamination during connections & disconnections

Latex Free

Blood Transfusion Sets

Sangofix[®] Air

Premium Blood Transfusion Set



Product Name	Article Code	Pack Size
SANGOFIX AIR 150CM LTX G18X1 1/2" Y-PC	4053729	100

Sangofix® Air Premium Blood Transfusion Set

Features and Benefit

- ISO spike** -Blunt spike to avoid perforation of bag and easily inserted into all type of standard blood container
- Soft, Elastic Tubing** guarantees a better flow rate, improves the drip constancy, facilitates an easier adjustment of the roller clamp & prevent kinking
- Filter Surface area**-10cm² with 200 micron filter
- Larger surface area** prevent the haemolysis of blood
- Flow control roller clamp** facilitates an easy & safe adjustment of flow rate.
- Parking space on roller clamp** prevents the leur-connector from contamination
- Special Y type Re-sealable injection port** offer ease of any additional medication

Blood Transfusion Sets

Oyster Blood Set (Non vented)



Product Name	Article Code	Pack Size
Oyster Blood set (Non vented)	575001BT-OYS	400

Oyster Blood set Blood Transfusion Set

Features and Benefit

- ISO spike** -Blunt spike to avoid perforation of bag and easily inserted into all type of standard blood container

- Soft, Elastic Tubing** guarantees a better flow rate, improves the drip constancy, facilitates an easier adjustment of the roller clamp & prevent kinking

- Filter Surface area**-10cm² with 200 micron filter

- Larger surface area** prevent the haemolysis of blood

- Flow control roller clamp** facilitates an easy & safe adjustment of flow rate.
-
- Parking space on roller clamp** prevents the leur connector from contamination

Accessoires

Discofix 3 way stopcock



Discofix with tubings



Product Name	Article Code	Pack Size
DISCOFIX 3-WAY BLUE LL	4095111IN	200
DISCOFIX-3 WAY WHITE LL	4095146IN	200
DISCOFIX C (BLUE) (LIPID RESISTANT)	16494C	200
DISCOFIX C (WHITE) (LIPID RESISTANT)	16495C	200
DISCOFIX 3 BLUE WITH 10CM	4098102	200
DISCOFIX C, BLUE,WITH 10CM (LIPID RESISTANT)	16500C	200
DISCOFIX C, BLUE,WITH 100CM (LIPID RESISTANT)	16560C	50

Discofix 3 way

Stopcock systems for infusion therapy

Features and Benefit

- Minimum Residual Volume** of 0.08ml
- Functional in design** can be turned around completely by 360 degree
- Uninterrupted flow** stream
- Easy to Operate**



Discofix C And Discofix C with tubing



Stress cracks

Repeated connection and disconnection of Luer fittings increases the risk of microbiological contamination as well as placing the housing under mechanical stress. This stress has been shown to lead to crack formation and risks:

- Air infusion
- Leakages during application of toxic drugs
- Blood losses /exsanguination
- Drug losses / wrong medication
- Infection



Examples from daily practice

Crack formation after Luer connection.

Discofix C And Discofix C with tubing

Discofix-C

Your Access to Premium Safety



B | BRAUN
SHARING EXPERTISE

- ❑ Drug Resistance material
 - Prevents Leakage, contamination and air embolism, accidental cracking.
 - Change of device give a cost impact.
- ❑ Rotale 45 degree every time make you feel about proper setting avoids leakage.
- ❑ Material is poly carbonate that give assurance of drug compatibility
- ❑ Discofix C with tubing always give facility for extra medication by disturbing the cannula site.

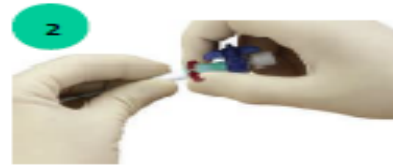
Target Speciality is Nursing Head, Microbiologist, ICU head, OT head, Emergency head

Designed for your safety

Recommendations for the use of drug-resistant 3-way stopcock



1 Simply Attach Discifix C



2 Screw it on tight



3 Once in place, the stopcock rotates 360° on its own axis, the desired position can easily be adjusted without any risk of disconnection.



4 Allows convenient access for injections and aspirations by rotating adapter



5 The tactile snap at every 45° turn will ensure the exact and comfortable adjustment of 3-way stopcock

-Offers great benefits to mobile/ ambulatory patients

-Improves safety by reducing the risk of disconnection

The stopcock that never cracks



"Discifix C"
Pic taken after 72 hours
after
stimulation with Propylene
carbonate

All competitor stop cocks
(Break apart with PC stimulation)



A simulation test with Propylene Carbonate suggests that all our competitors which are made up of Polycarbonate do not withstand the corrosive Propylene Carbonate, whereas, DISCOFIX-C is made up on POLYAMIDE which has no effect of Propylene Carbonate. Thus offers significant resistance even after 72 Hrs.

Polyamide material of DISCOFIX-C offers significant advantages such as:

- Withstand hazardous drug and preparation for up to 72 Hours
- Maintains a leak proof connection even during long-term application
- Prevents leakage, contamination and air embolism

Accessoires

Combidyn

Pressure Monitoring Lines (PML)



Article Code	Product Name	Length	Pack Size
5205026	COMBIDYN PVC PRESS.TUBING 1.5X2.7X1500MM	150CM	50 /case
5205034	COMBIDYN PVC PRESS. TUBING TRANSP. 200CM	200CM	50 /case

Features and Benefit

- ❑ **Pressure tubing** for the measurement of physiological pressure
 - ✓ \varnothing 1.5 x 2.7 mm
 - ✓ Accurate pressure monitoring

- ❑ **Pressure stability** tested up to 8 bar
 - ✓ Transparent for visual control

- ❑ **Tubing** of various lengths

- ❑ **Dead space** approx. 1.2 ml/m

- ❑ **Tube length** matches practical requirements

- ❑ **luer-fittings**
 - ✓ with special screw thread -male/female

Target Audience- Cardiac Anesthetic, General Anesthetic, ICU head

Combidityn

Pressure Monitoring Lines

Pressure tubing

- Accurate pressure monitoring
Connection between syringe infusion pump and patient
- Diameter : 1.5 x 2.7 mm

Pressure stability

- Transparent for visual control
- Tested up to 8 bar or 116 psi

luer-fittings

- Special screw thread -male/female connection-
- Male luer lock at one end and female luer lock at other end and fits all standard equipment.
- Luer lock connectors provide secure fitting.



Tubing

- Tubing Kink resistant, clear, non-toxic medical grade PVC material tubing of various lengths –150 cm, 200 cm , 100 cm
- Tube length matches practical requirements
- Dead space approx. 1.2 ml/m



Article Code	Product Name	Length	Pack Size
5205026 - OYS	COMBIDYN PVC PRESS.TUBING 1.5X2.7X150MM	150CM	50 /case
5205034 - OYS	COMBIDYN PVC PRESS. TUBING TRANSP. 200CM	200CM	50 /case

B. Braun Medical (India) Pvt. Ltd.

Unit No. 601 | 6th floor | Boomerang | Chandivali Farm Road | Andheri (E) | Mumbai- 400 072 | Maharashtra
Phone +22 6668 2222 | Fax +22 6668 2121 | www.bbraun.co.in

Syringes & Needles

Omnivan™

Three piece disposable syringe

Article Code	Product Description	pack size
4750200-IN	OMNIVAN 2 ML SOLO	2000
4750300-IN	OMNIVAN 3 ML SOLO	2000
4750500-IN	OMNIVAN 5 ML SOLO	1600
4751000-IN	OMNIVAN 10 ML SOLO	1000
4752000-IN	OMNIVAN 20 ML SOLO	400
4750222-IN	OMNIVAN 2 ML DUO 22GX1 - INDIA	2000
4750223-IN	OMNIVAN 2 ML DUO 23GX1 - INDIA	2000
4750224-IN	OMNIVAN 2 ML DUO 24GX1 - INDIA	2000
4750226A-IN	OMNIVAN 2 ML DUO 26GX1 - INDIA	2000
4750322-IN	OMNIVAN 3 ML DUO 22GX1	2000
4750323-IN	OMNIVAN 3 ML DUO 23GX1	2000
4750324-IN	OMNIVAN 3 ML DUO 24GX1	2000
4750522-IN	OMNIVAN 5 ML DUO 22GX1 - INDIA	1600
4750523-IN	OMNIVAN 5 ML DUO 23GX1 - INDIA	1600
4750524-IN	OMNIVAN 5 ML DUO 24GX1 - INDIA	1600
4751021-IN	OMNIVAN 10 ML DUO 21GX1 - INDIA	1000
4751021V-IN	OMNIVAN 10 ML DUO 21GX1 1/2	1000
4751021VL-IN	OMNIVAN 10 ML DUO 21GX1 1/2 LUER LOCK	1200
4751022-IN	OMNIVAN 10 ML 22GX1 - INDIA	1000
4752021V-IN	OMNIVAN 20 ML DUO 21GX1 1/2 - INDIA	400
4752018V-IN	OMNIVAN 20 ML DUO 18GX1 1/2 - INDIA	400
4755000S-IN	OMNIVAN 50 ML LUER SLIP INDIA	300
4755000L-IN	OMNIVAN 50 ML (LL)	300
4617509F-03	OMNIFIX 50ML LUER LOCK	100
9161426	OMNIFIX 1ML 26X 0.5' LUER	1800
9161635	OMNICAN U 40 1 ml - 30 Gx 8 mm	2400



Omnivan™ Three piece disposable syringe

Features and Benefit

- ❑ **Gasket** made of Thermoplastic Elastomer (TPE). This TPE is approved for medical use
- ❑ **Barrel & Plunger** made of polypropelene which is of Food Grade. These are non-toxic and approved for medical use.
- ❑ **Silicon fluid** is a composition of medical grade silicon fluids. It acts as a lubricant to move the plunger consistently in the Barrel while injecting.
- ❑ **Green plunger** easy recognition of filling volume

Syringes & Needles Sterican®

Single-use hypodermic needles for injection & aspiration

Article Code	Product Description	Pack Size
4751615IN	STERICAN 16G X1 1/2"	5000
4751801IN	STERICAN 18G X1"	5000
4665120IN	STERICAN 18G X1 1/2"	5000
4665112IN	STERICAN 19G X1 1/2"	5000
4657500IN	STERICAN 20G X1"	5000
4657519IN	STERICAN 20G X1 1/2"	5000
4657543IN	STERICAN 21G X1"	5000
4657527IN	STERICAN 21G X1 1/2"	5000
4752201IN	STERICAN 22G X1"	5000
4660021IN	STERICAN 22G X1 1/2"	5000
4657667IN	STERICAN 23G X1"	5000
4752315IN	STERICAN 23G X1 1/2"	5000
4657675IN	STERICAN 24G X1"	5000
4752415IN	STERICAN 24G X1 1/2"	5000
9186158IN	STERICAN 25G X1"	5000
9186166IN	STERICAN 25G X1 1/2"	5000
4657683IN	STERICAN 26G X1"	5000
4752615IN	STERICAN 26G X1 1/2"	5000
4665457IN	STERICAN 26G X1/2"	1000
9186174IN	STERICAN 27G X 1"	5000
4665406IN	STERICAN 27G X 1/2"	5000



Sterican® Single use hypodermic needle

Features and Benefit

- ❑ **Triple Facet Bevel-** For minimal pain upon puncture, reduces tissue trauma
- ❑ **Needle Material** – Stainless Steel
Chromium nickel steel with extremely smooth surface & silicone coating
- ❑ **Transparent Luer lock plastic hub** – Made of polypropylene, helps in rapid visualization of blood rapidly shows successful venipuncture
- ❑ **Color coded Hub and dispenser-** Identifies the outer diameter of the needle confirm to ISO 6009



Large Volume Parenterals (LVP)

BBraun IV Fluids Standard solution

ARTICLE CODE	PRODUCT	PACK SIZE	# OF BTLS / CASE
3610493	DEXTROSE 5%	500ML	25
3610492	NACL 0.9%	500ML	25
3610499	DNS	500ML	25
3610687	0.45 DNS	500ML	25
3610498	RINGERS LACTATE	500ML	25
3610494	DEXTROSE 10%	500ML	25
3610522	ELECTROLYTE P	500ML	25
3610523	ELECTROLYTE M	500ML	25
3610525	ELECTROLYTE G	500ML	25
3610524	ELECTROLYTE E	500ML	25
3610698	RINGER INJ	500ML	25
3610699	TINIDAZOLE	400ML	25
3610520	METRONIDAZOLE	100ML	100
3610600	CIPROFLOXACIN	100ML	100
3610601	OFLOXACIN 100 ML	100ML	100
3610598	NACL 0.9%	100ML	100
3610496	DEXTROSE 25%	100ML	100
3610685	FLUCONAZOLE	100ML	100
3610684	ORNIDAZOLE	100ML	100
3610695	LEVAFLOXACIN	100ML	100
3610599	MANNITOL	100ML	100
47200647-AH	PARACETAMOL INJ. 1% W/V	100ML	100
47200658-AH	HES6%	500ML	25
47200036-AH	AHLOX EYE DROPS 5ML	5ML	10
47200047-AH	GENTAMYCINE E/E DROPS	5ML	10
47200115-AH	LARMESE LUBRICATING EYE DROP	10ML	10
47200657-AH	OFLOXACIN WITH ORNIDAZOLE	100ml	10



BBraun IV Fluids Standard solution Nipple Head Bottles

Features and Benefit

- ❑ **Made of Polyethylene** material
- ❑ **Helmet** to avoid nipple tip damage
- ❑ **Overwrap** to avoid contamination of bottle
- ❑ **Color coding** to avoid medication error
- ❑ **Wide range** of solutions available
Eg: D5, DNS, RL, Mannitol, NaCl, Metronidazole, Ofloxacin, Fluconazole, Ornidazole, Levafloxacin, Ciprofloxacin, Tinidazole.etc



Introduction to I.V. Cannulation

What is an IV cannula ?

Peripheral venous access device

Used for

- Infusion of intravenous solutions
- Administration of bolus medication
- Blood sampling for analytical tests

In-dwelling device meant for continuous usage of up to 3-4 days only.

Construction Of An IV Cannula

- A steel needle with a plastic catheter sleeve.
- Tip of the needle is used to puncture the vein.
- Steel needle is later removed and discarded.
- Plastic catheter is left in the vein for infusion, injection and blood withdrawal purposes.

Where is IV cannula used ?

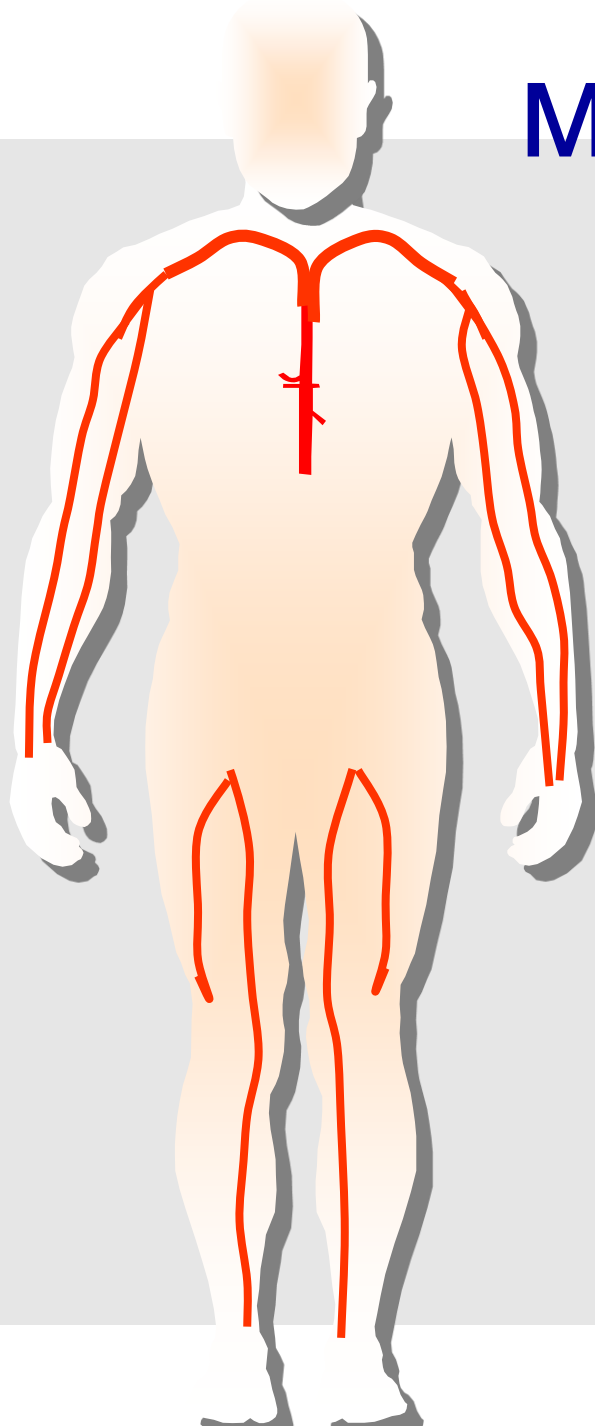


Where is IV cannula used ?

Virtually in ALL hospital settings and areas of therapy.

- All admissions involving infusion.
- Observations.
- Pre-surgical preparation.
- Post surgical critical care.
- Re-hydration.
- Nutrition.
- Infused medication

Major Veins in the Human Body



Vena Cava

Subclavian

Axillary

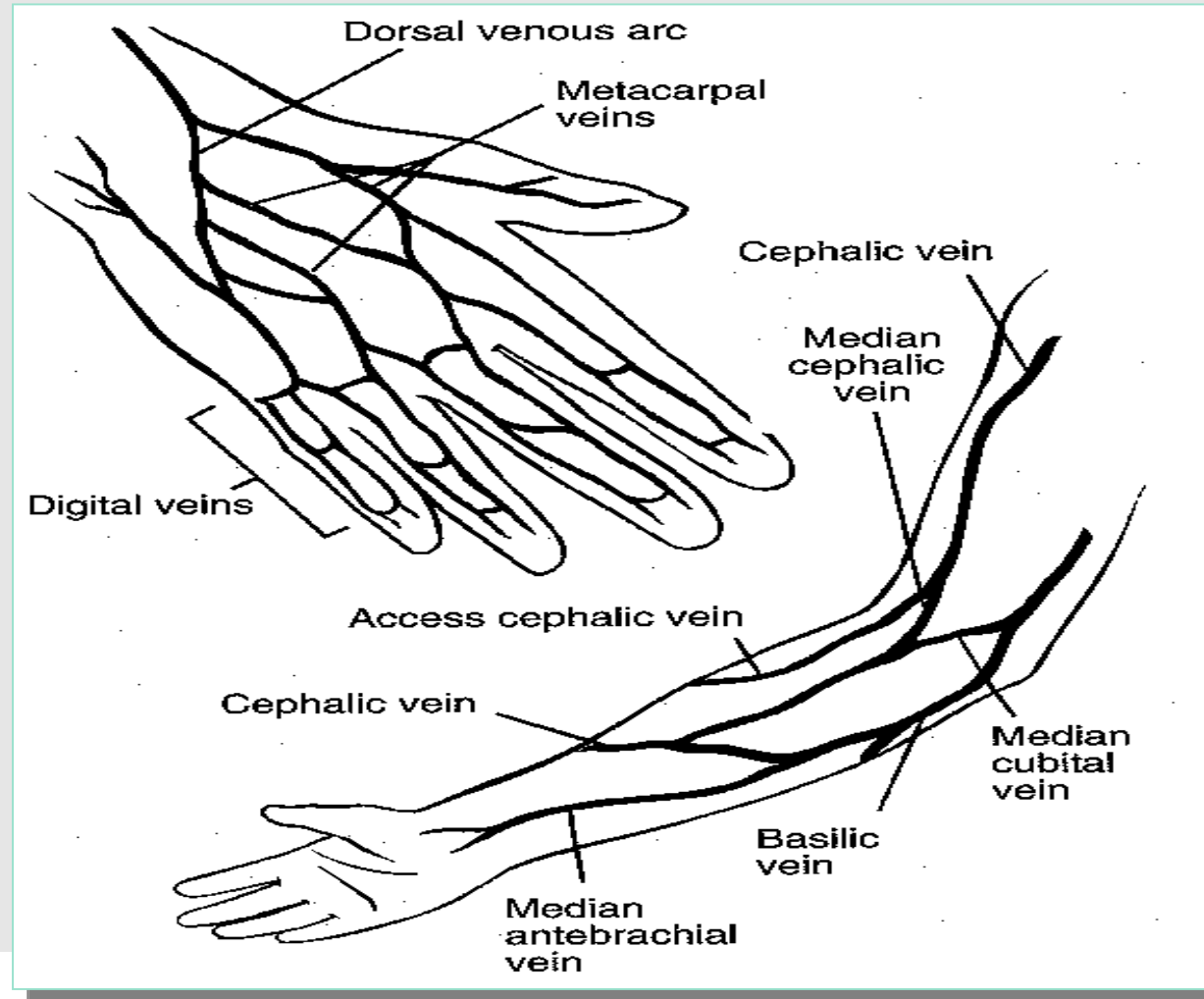
Cephalic

Basilic

Femoral

Saphenous

Peripheral veins for I.V. Cannulation





PERIPHERAL VENIPUNCTURE

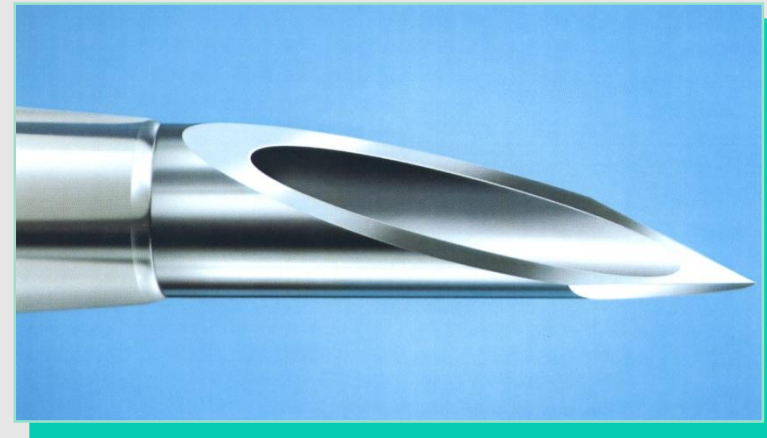
GAUGES OF I V CANNULA

14 G Orange	Accident and Emergency & Fluid Replacement after Haemorrhage
16 G Grey	Operating Room, Fluid Replacement due to Blood loss during Surgery
18 G Green	Operating Room, Post Surgical Wards for minor operations, Maintenance of Venous Access
20G Pink	General Medical and Surgical Wards Maintenance, Venous Access – Drugs and Common Infusions
22 G Blue	Paediatric and Oncology Wards for Small Veins
24 G Yellow	Neonatal Intensive Care Unit, Nursery, Oncology

FEATURES OF IDEAL CANNULAE

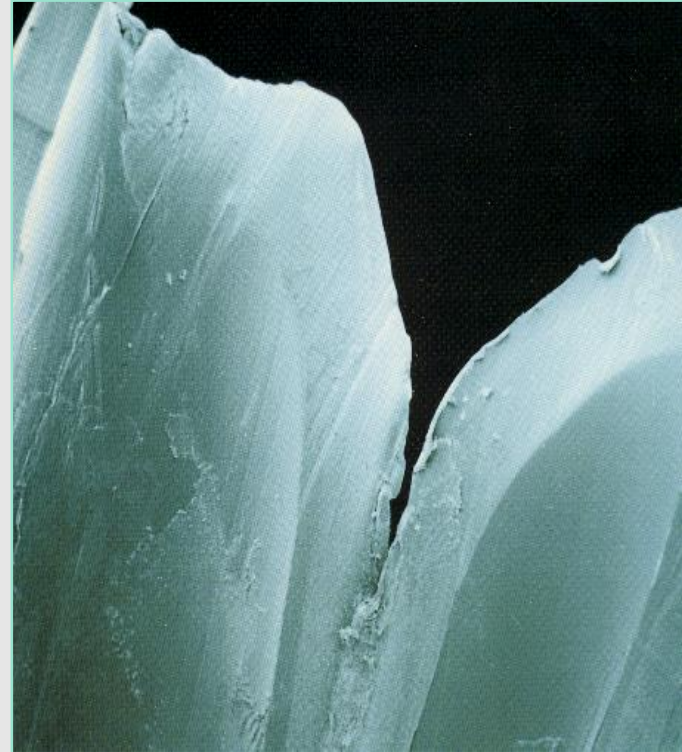
OPTIMAL BEVEL LENGTH: -

1. Prevents perforation of vein wall,
2. Less force required for insertion,
3. Less time required for healing & less chances of infection.



CATHETER SHEATHING: -

1. Accidental breaking of catheter in vein can result in catheter embolism, can be even fatal.
2. All new generation catheters are radio-opaque due to safety reasons.



X-RAY CONTRAST LINES....

Provided with all new generation I. V. Cannulae viz. Vasofix (B. Braun) etc. (Venflon® BD has no radio-opaque lines!).

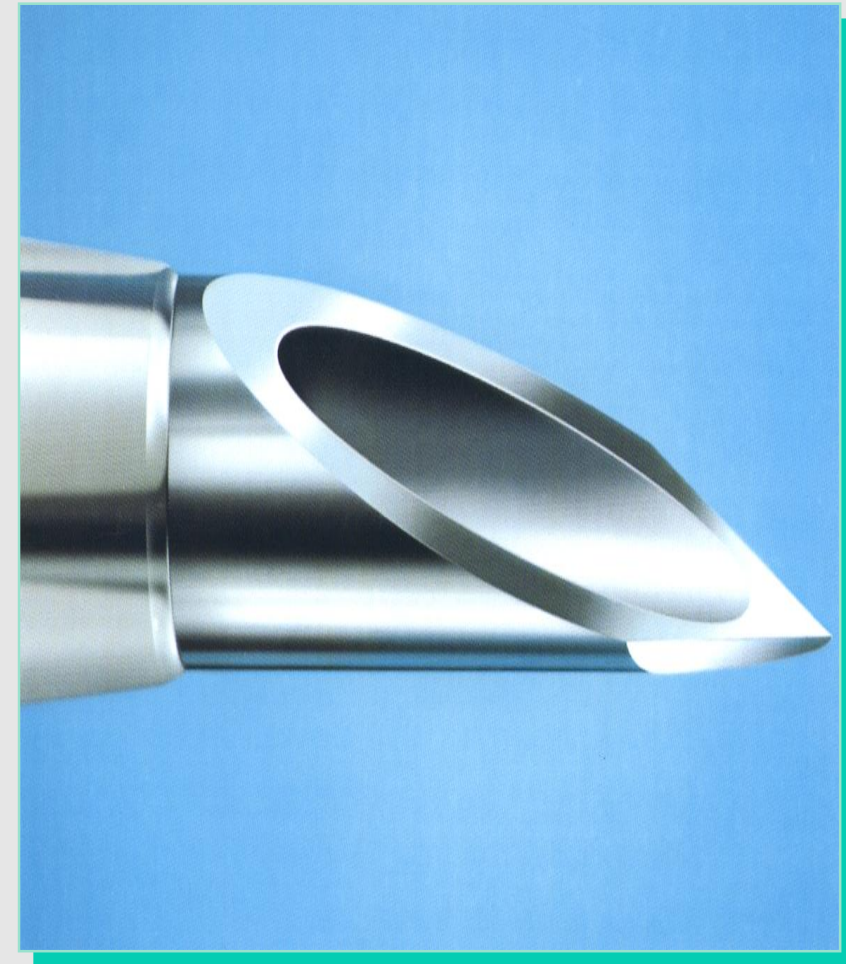


OPTIMIZED FEATURES FOR MAXIMUM SAFETY:

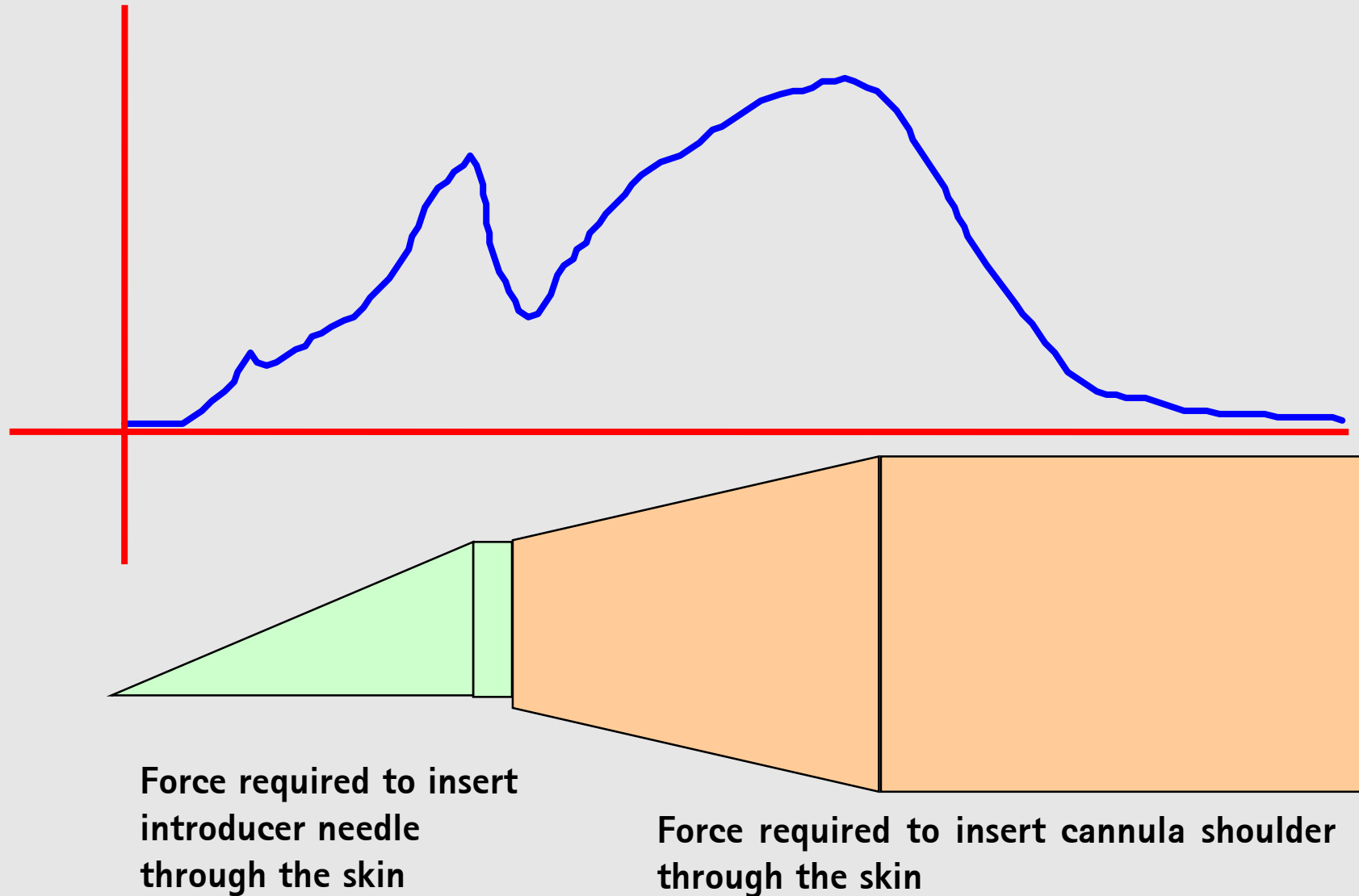
The tried & trusted Cannulae Range from B.Braun is based on experience over many years of clinical use and latest production technology.

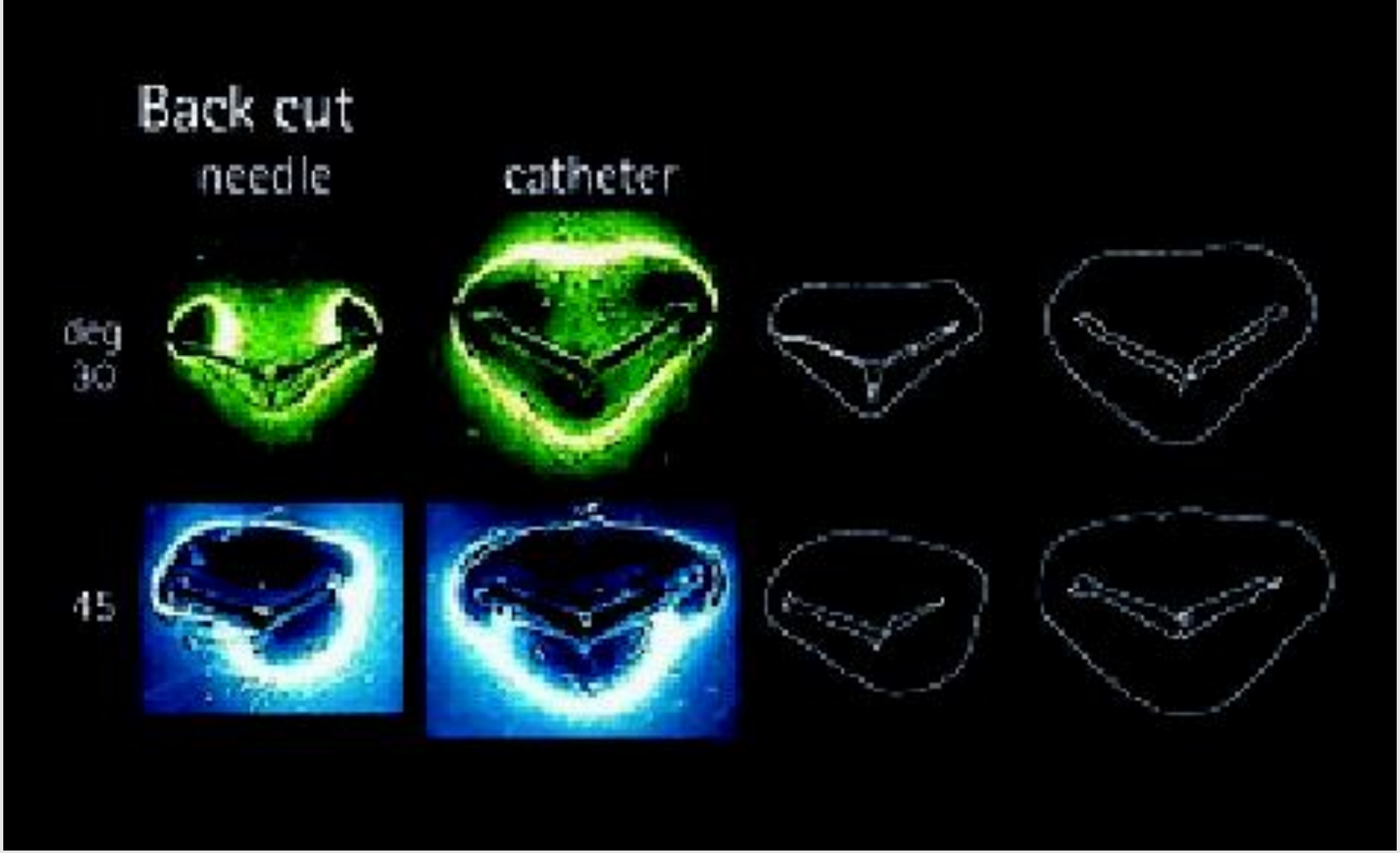
Atraumatic Catheter Tip:

The hardly perceptible transition from the steel needle to the conically tapered catheter tip permits a gentle catheter placement and causes less pain.



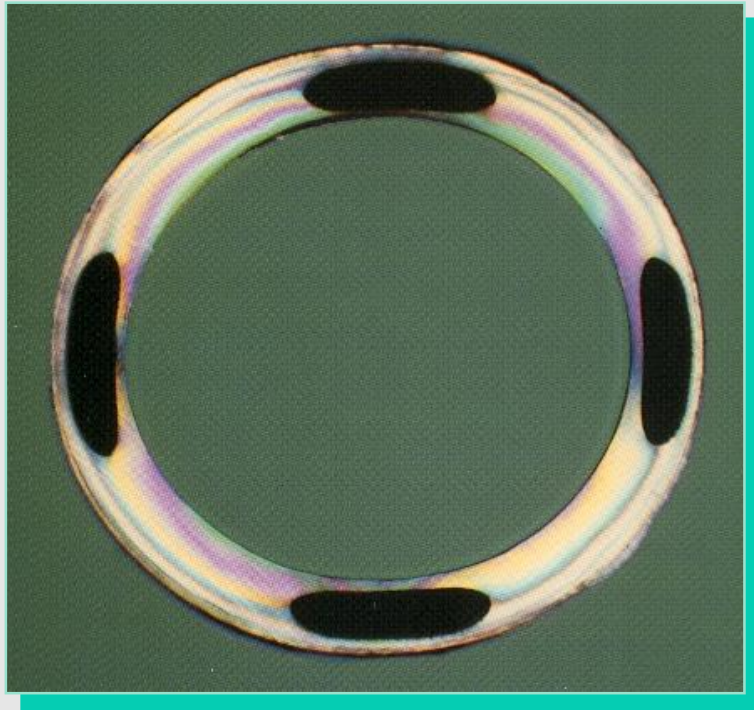
PENETRATION FORCE





Optimized Features for Maximum Safety:

The tried & trusted Cannulae Range from B.Braun is based on experience over many years of clinical use and latest production technology.

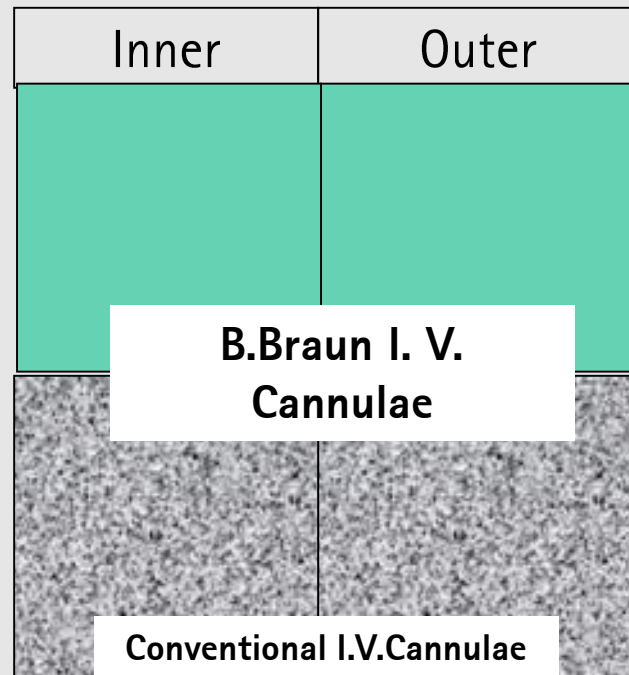


Safety First:

All I.V.Cannulae from B.Braun are provided with Radio-opaque lines for easy detectability and maximum patient safety.

Optimized Features for Maximum Safety:

The tried & trusted Cannulae Range from B.Braun is based on experience over many years of clinical use and latest production technology.



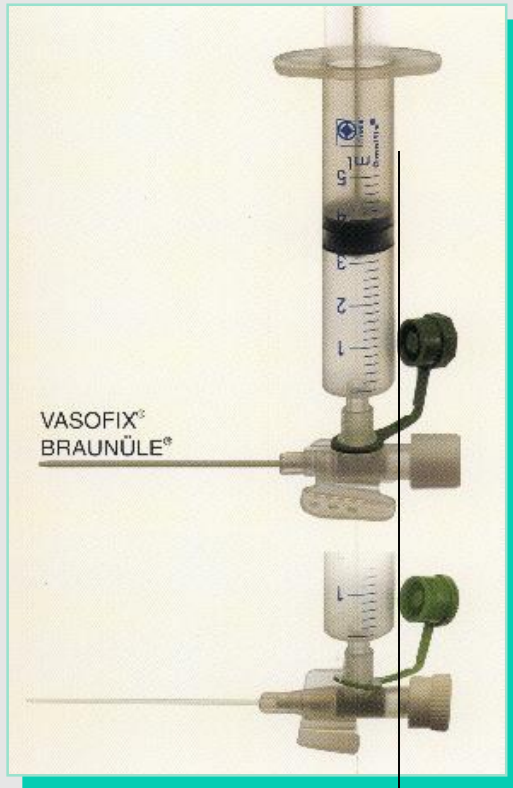
Safety First:

Minimal catheter related thrombogenesis is achieved by the combination of the inherent smooth texture of FEP Teflon coupled with fully encapsulated radiopaque strips.

Conventional I.V.Cannulae achieve radiopacity by homogenous mixing of radiopaque substance leading to rough inner & outer surfaces.

Optimized Features for Maximum Safety:

The tried & trusted Cannulae Range from B.Braun is based on experience over many years of clinical use and latest production technology.

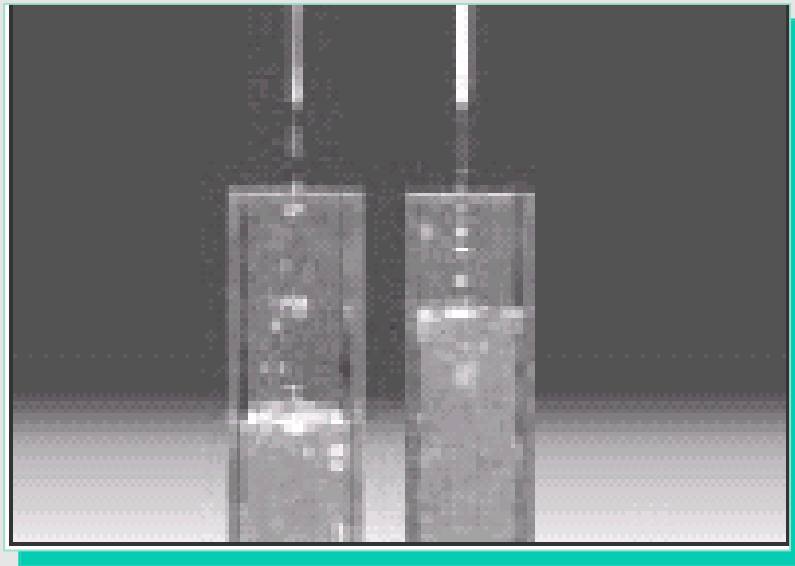


Superior Design for Maximum Patient Comfort:

Centrally placed injection port between the wings ensures minimum discomfort to the patient during injections through the injection port & prevents injury to the intima.

Optimized Features for Maximum Safety:

The tried & trusted Cannulae Range from B.Braun is based on experience over many years of clinical use and latest production technology.



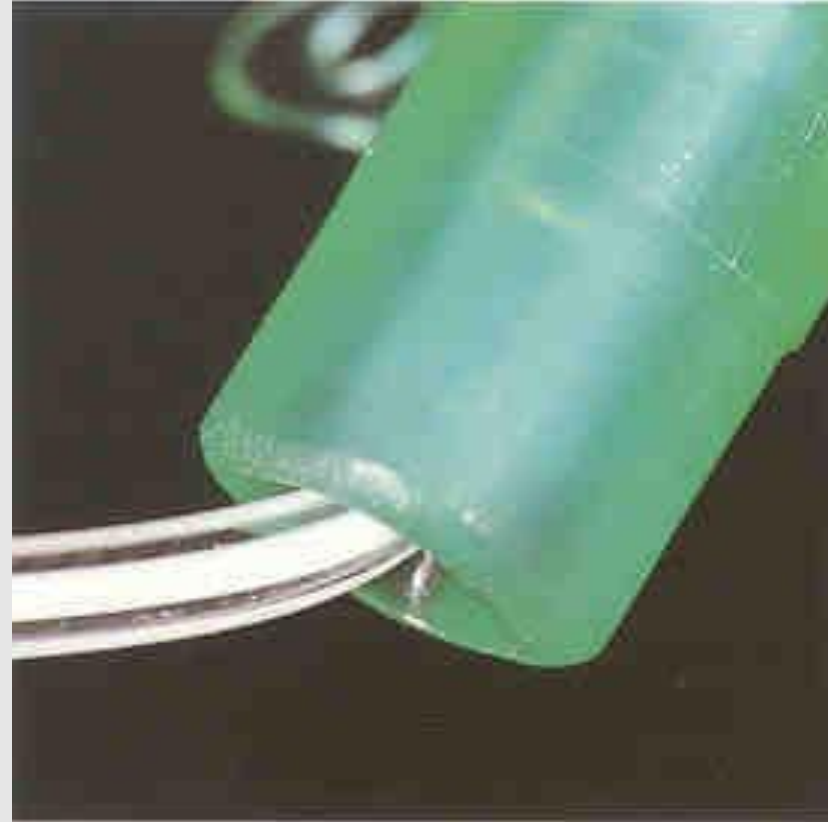
Conventional I.V.Cannulae

B.Braun I. V. Cannulae

Superior Flow Rates:

Superior Flow rates with even viscous solutions are achieved due to extremely thin walled structure and smooth inner & outer surfaces.

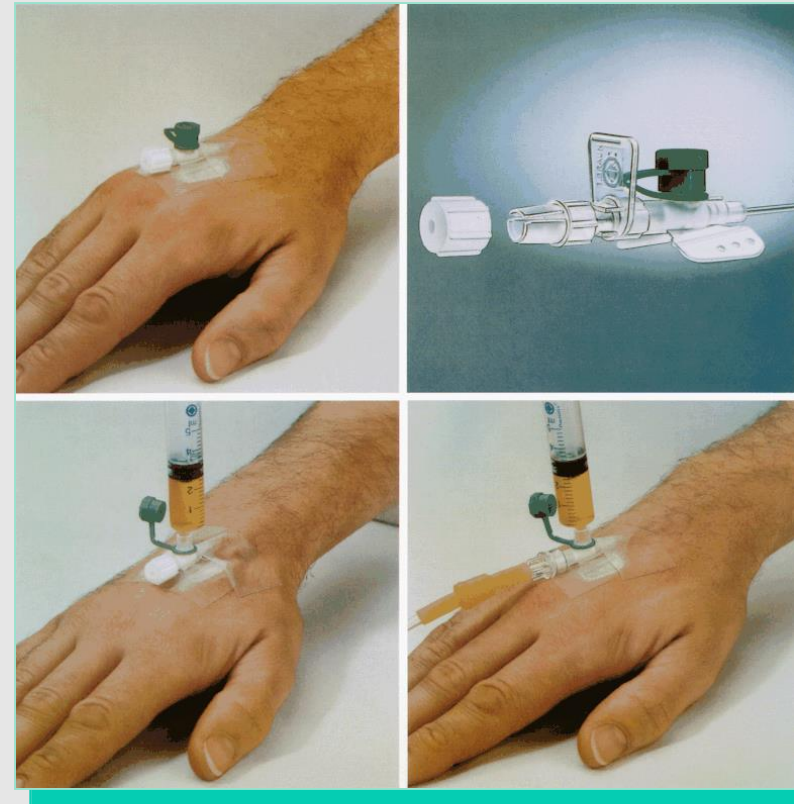
CANNULA TO HUB CONNECTION



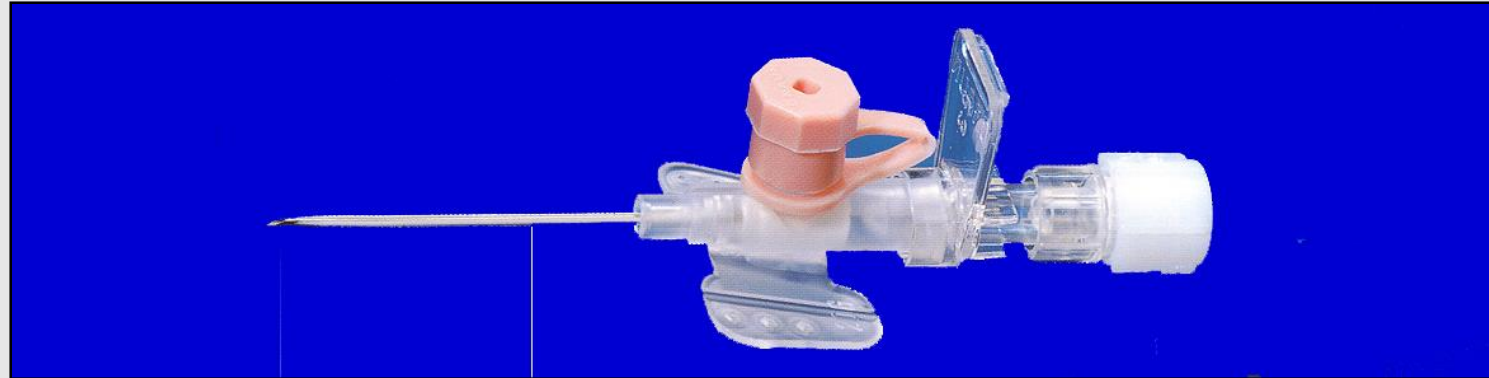
- Rounded hub edges reduces risk of catheter kinking if the catheter is bent at the hub fixation point.

Advantages of ported cannulae

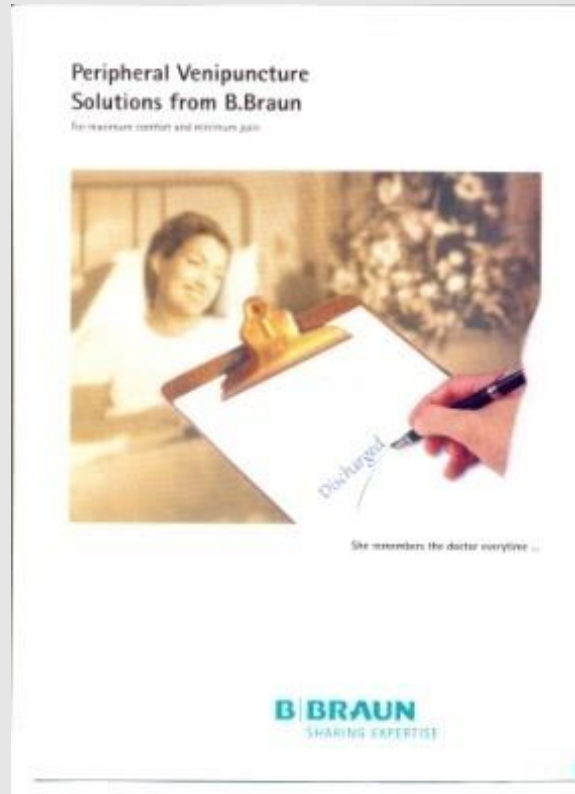
- Reduces multiple injections to patient.
- Reduces risk of needle stick injuries to nursing staff.
- Considerable reduction in hospital waste & cost (needles).



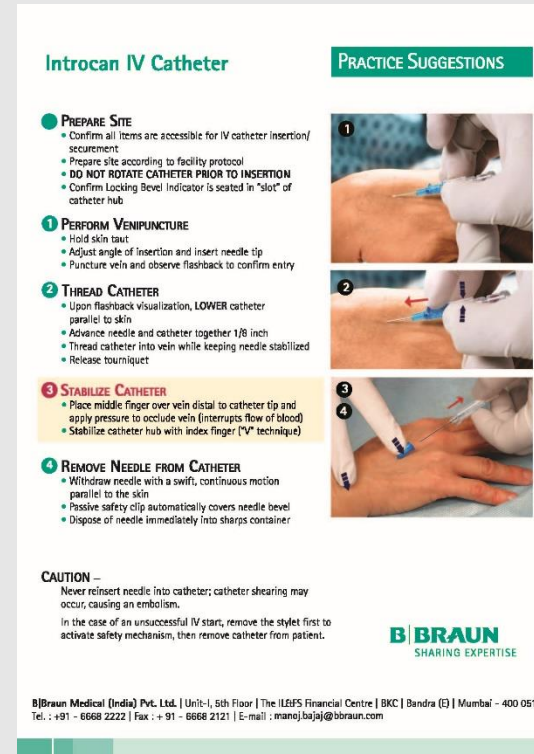
Vasofix® Braunula FEP



- Market Segment : Ported Cannula
- Handling : Grip Plate method
- Other Features : Wing
- Catheter Material : FEP



Peripheral Venipuncture

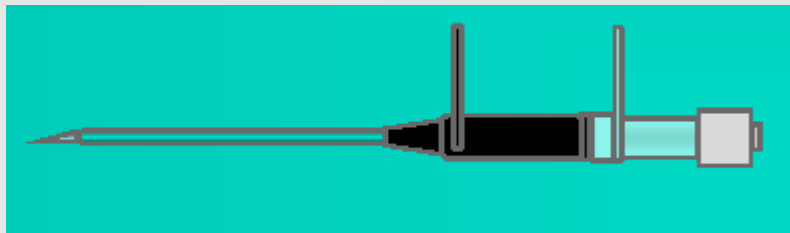


Introcan Practice Poster

Cavafix®



Catheter



Braunula

catheter set according to Braunula technique

Article Code	Product Description	Pack Size	Catheter		Introducer	
			Gauge (G)	Length	Gauge(G)	Length
4152573	CAVAFIX CERTO 257 7CM G16 45CM G18 LL	50	18	45	16	7
4152751	CAVAFIX CERTO 275 LOCK	50	18	70	16	5
4153588	CAVAFIX CERTO 358 8CM G14 45CM G16 LL	50	16	70	14	8
4153758	CAVAFIX CERTO 375 5CM G14 70CM G16 LL	50	16	70	14	5
4154584	CAVAFIX CERTO 458 8CM G12 45CM G14 LL	50	14	45	12	8
4154754	CAVAFIX CERTO 475 5CM G12 70CM G14 LL	50	14	70	12	8
4286340	CAVAFIX MT 134 4CM G18 32CM G20 LL	50	20	32	18	4

Features and Benefit

- ❑ **Based on Braunula Principle ensure safe catheter placement**
 - ✓ no catheter damage
 - ✓ less risk of vein perforation
 - ✓ low risk of slipping out of vessel
 - ✓ easy recognition of vein/ **artery**

- ❑ **Basilican access possible** even non-experienced physicians can place it, ensure fast and easy introduction in emergency situations

- ❑ **Protection tube for "No touch technique"**
 - ✓ No risk of blood contact for medical staff
 - ✓ No catheter contamination risk for the patient
 - ✓ handling possible even in unsterile surrounding (accidents, helicopter etc.)

- ❑ **Catheter made of CERTON, a medical grade Polyurethane(PUR) material**
 - ✓ High Indwelling time
 - ✓ Low thrombosis rate because of extremely smooth catheter surface
 - ✓ Absolutely inert and biocompatible thin wall catheter
 - ✓ Less disturbance of blood flow

Features and Benefit

- ❑ **Highly elastic and flexible catheter without kinking**
 - ✓ tough material does not rip or tear
 - ✓ 100 % thermo elasticity
 - ✓ No adsorption effect like PVC (accumulation of thin film on the surface)

- ❑ **Three embedded x – ray contrast lines**
 - ✓ Good visibility with x –ray & placement control
 - ✓ Shows up as parallel lines in chest x –ray

- ❑ **Rounded Catheter Tip** prevents intima (inner most layer of vein or artery) damage during introduction