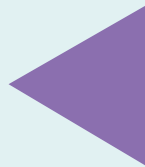




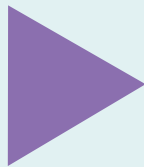
FLUID MANAGEMENT

THE NAVIGATION BUTTONS



Backward

Click to move
back a page



Forward

Click to move
on a page



Exit

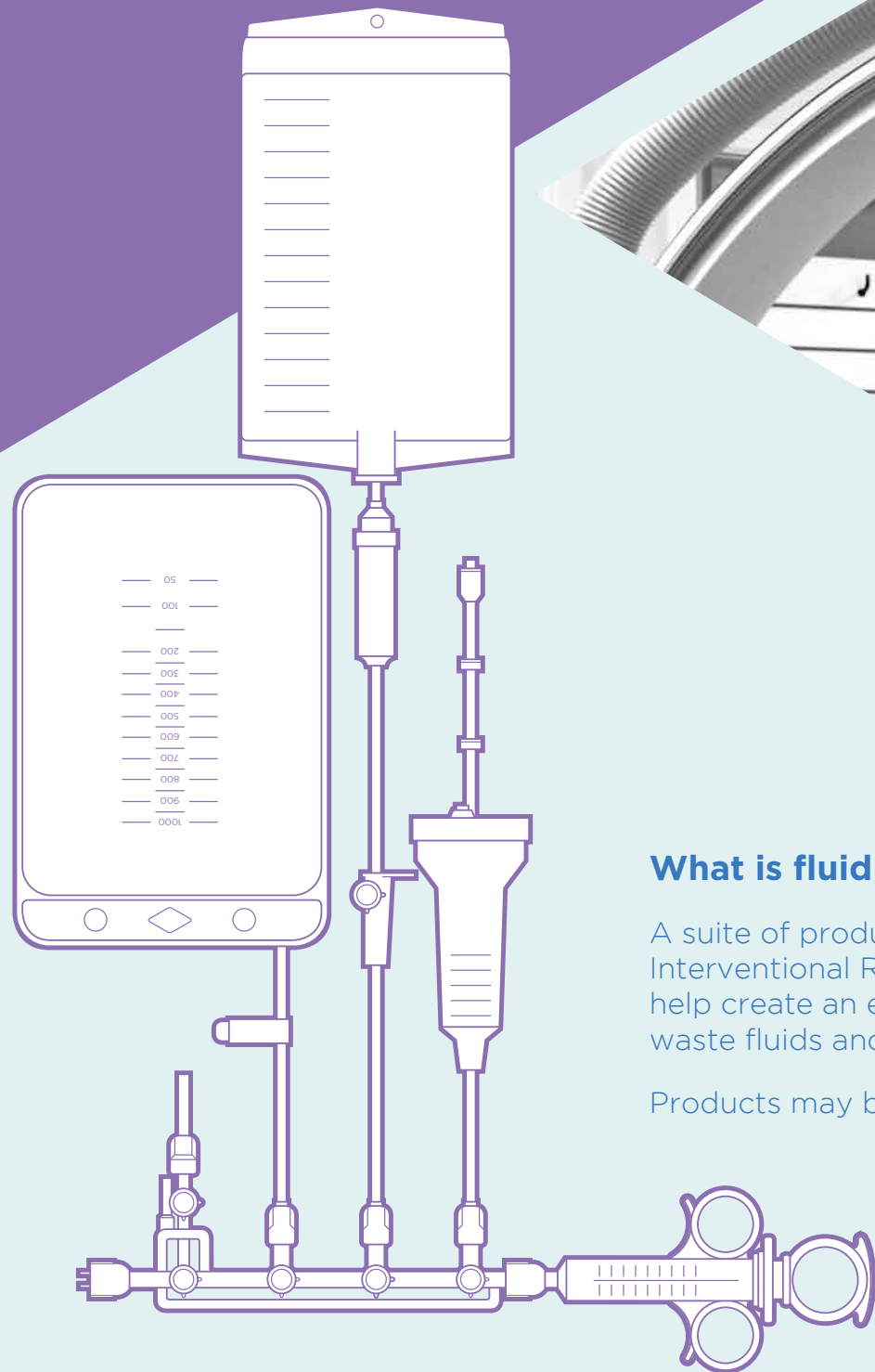
Click to exit the the
pop up window



Info

Click to find
out more

INTRODUCTION



What is fluid management?

A suite of products utilised in the Cardiac Cath Lab, Interventional Radiology, and Vascular Surgery that work together to help create an efficient, closed system to manage saline, contrast and waste fluids and measure pressures during endovascular procedures.

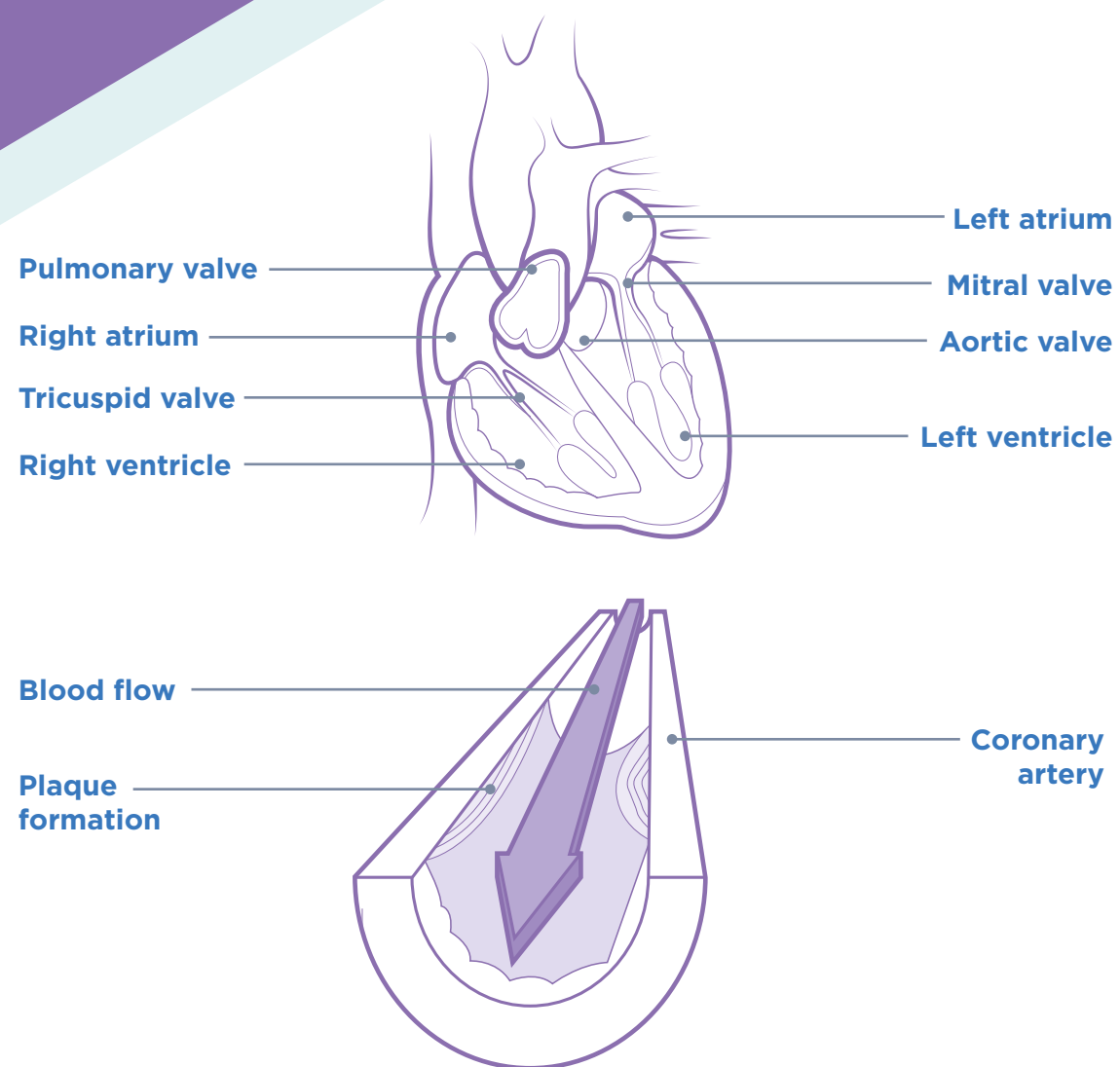
Products may be sold as standard kits, custom kits, or single sterile*

*Not all items are available as single sterile



WHAT IS CARDIOLOGY?

THE PROCEDURES & TERMINOLOGY



CORONARY ANGIOGRAM/CARDIAC

Catheterisation

Definition

This is a diagnostic procedure that visualises and gives information on the heart chambers, valves and vessels (coronary arteries).

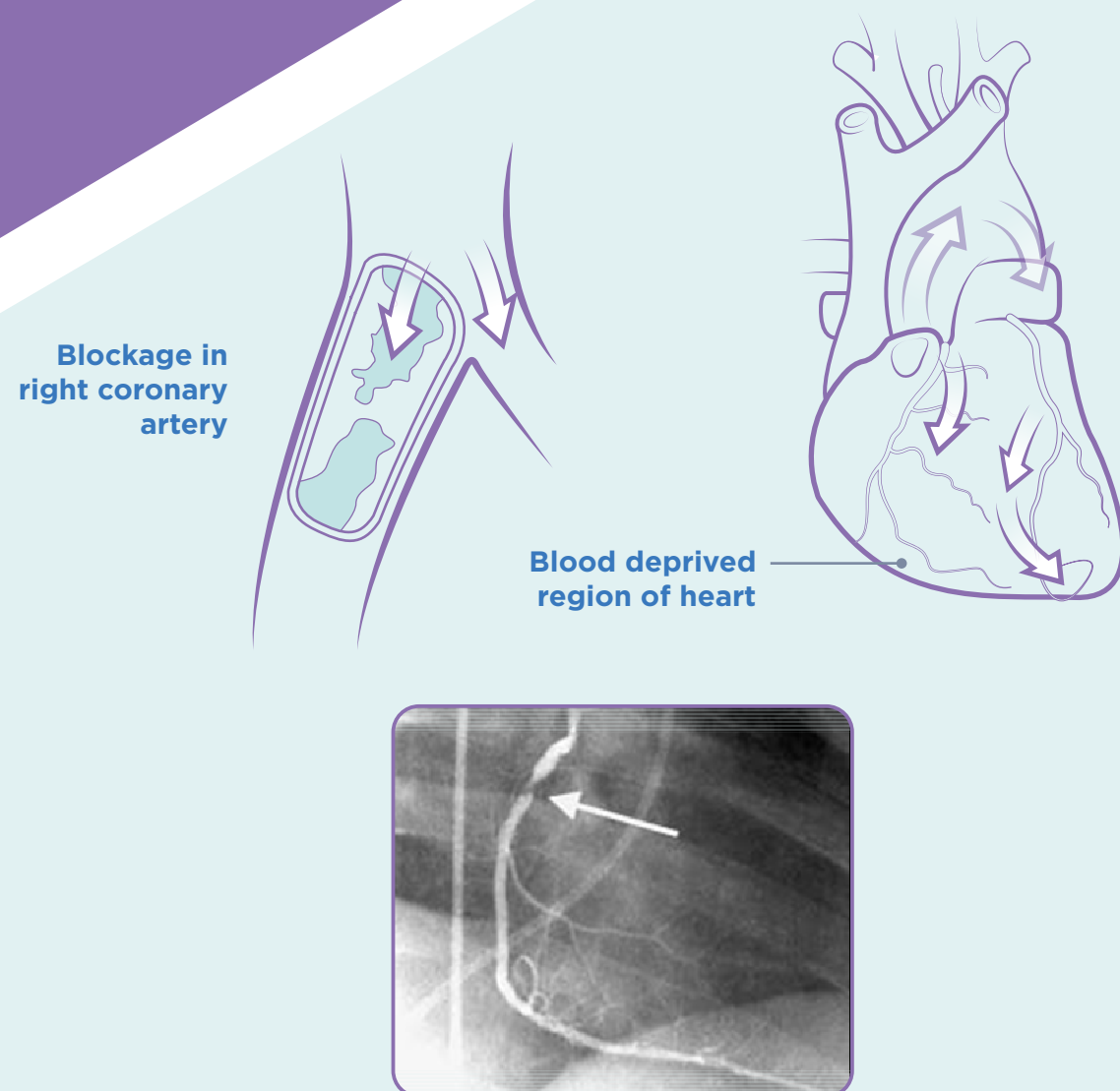
Purpose

Angiography is used to detect abnormalities, including narrowing (stenosis) or blockages in the blood vessels (occlusions) throughout the coronary system. It also measures the cardiac output of the heart.

 [View procedure](#)

WHAT IS CARDIOLOGY?

THE PROCEDURES & TERMINOLOGY



CORONARY ANGIOGRAM/CARDIAC

Procedure

In virtually all cases the patient will only be administered local anaesthetic and will therefore be awake during the procedure. The procedure is usually performed in a Cardiac Catheterisation laboratory/suite under sterile conditions (in some countries it may still be performed in operating theatres). The Cardiologist (a doctor specialising in Cardiology) and an assistant, often a nurse, will scrub for the procedure, wearing sterile gowns and gloves.

All of the sterile equipment needed for the procedure is laid out on a trolley. This will include items such as; swabs, sponge sticks, forceps, bowls, needles, syringes, scalpels, a guidewire and cardiac catheters. The manifold is prepared by attaching the manometer/pressure monitor line to the transducer and the contrast line is inserted into a bottle of contrast. The manifold will be primed by filling with fluid to remove air.



RANGE OVERVIEW

Kimal offers a wide range of quality FM products both Sterile and non-sterile, this manual is designed to show our most popular* non-sterile FM products.

All are available for inclusion into our Sterile procedure packs.

*contact kimal direct for more information/options

MANIFOLDS



SYRINGES



LINES



STOPCOCKS



PROTECTION STATIONS



FLUID DELIVERY LINES



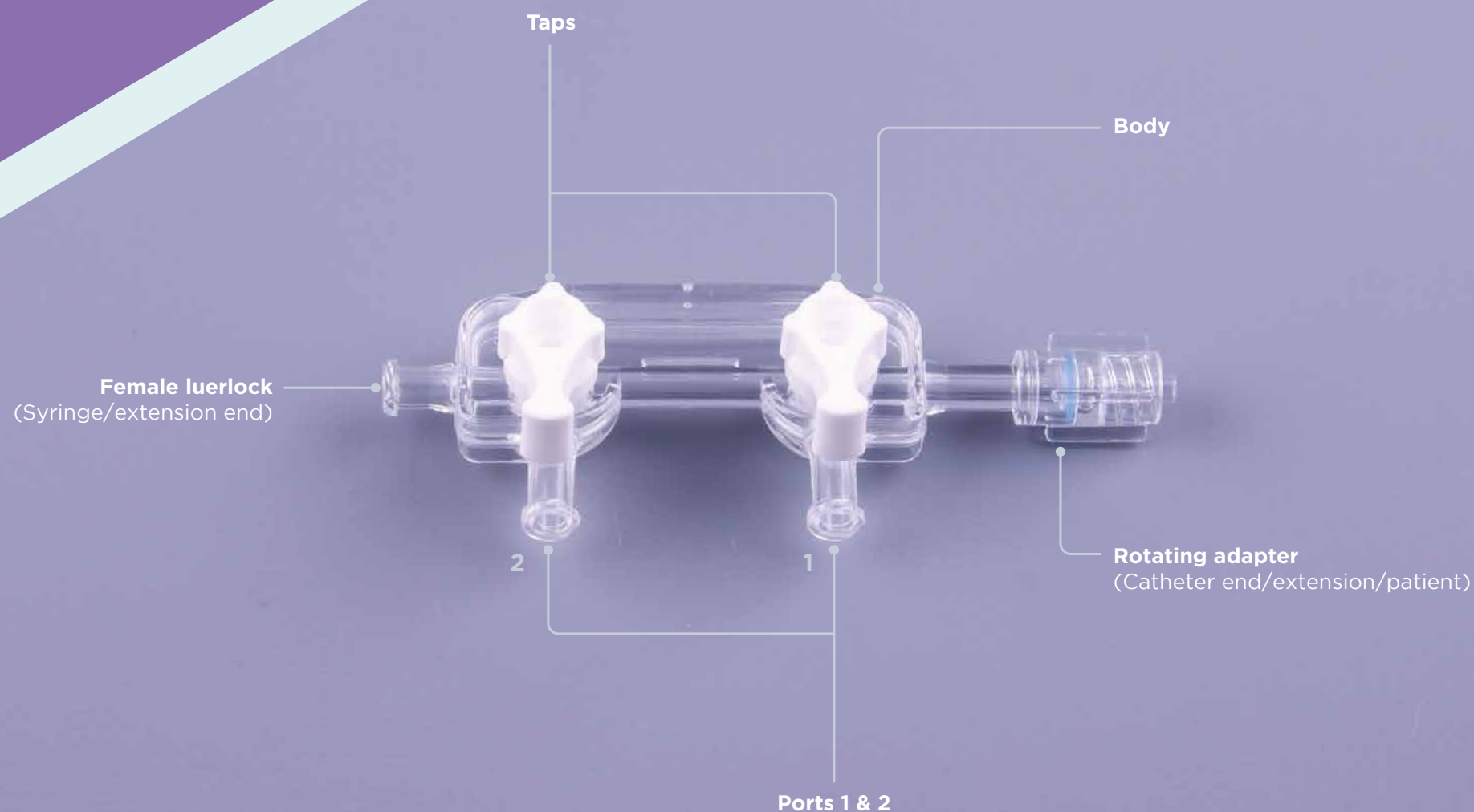
CONTRAST CONTROL/SAVING DEVICE



STANDARD KIT



MANIFOLDS



The hub of the system

Manages the flow of contrast, saline and waste and allows access to vascular pressures.

Manifolds/fluid contrast lines - these are only usually required for a cardiac angio procedure pack.

A manifold can be supplied on its own or as part of a kit including fluid/contrast/manometer pressure line.

Questions to ask

- ▶ What type of manifold? 2 port, 3 port, left hand, right hand, on/off, medium/high pressure?
- ▶ Length of manometer/pressure line?
- ▶ Length of contrast line?
- ▶ How does the contrast line need to end? With a spike or with chamber and spike?
- ▶ Do they require a contrast saving device? Namic squeeze?

Some centres may use a high pressure extension line to deliver contrast from a pump. Kimal have these available in a number of lengths.

i Play 2 and 3 port manifold video

i Play 2 port manifold video

i Product codes

i Popular manifolds

MANIFOLDS



MANIFOLDS



POPULAR MANIFOLDS

2 PORT MANIFOLDS



Navilyst 2 Port Right OFF (Normal-Medium Pressure)

Raw Material Code: 84038200/DE
Sterile Order Code: H965700382001
Ports: 2
Handles: 2 (easy turn)
Handle Configuration: Right OFF
Pressure: 1379kPa (200 psi/14 bar) Static Pressure

Navilyst 2 Port Right OFF (High Pressure)

Raw Material Code: 80037200/DE
Sterile Order Code: H965700372001
Ports: 2
Handles: 2 (stiff turn)
Handle Configuration: Right OFF
Pressure: 3447kPa (500 psi/35 bar) Static Pressure

3 PORT MANIFOLDS



Navilyst 3 Port Right OFF (Normal-Medium Pressure)

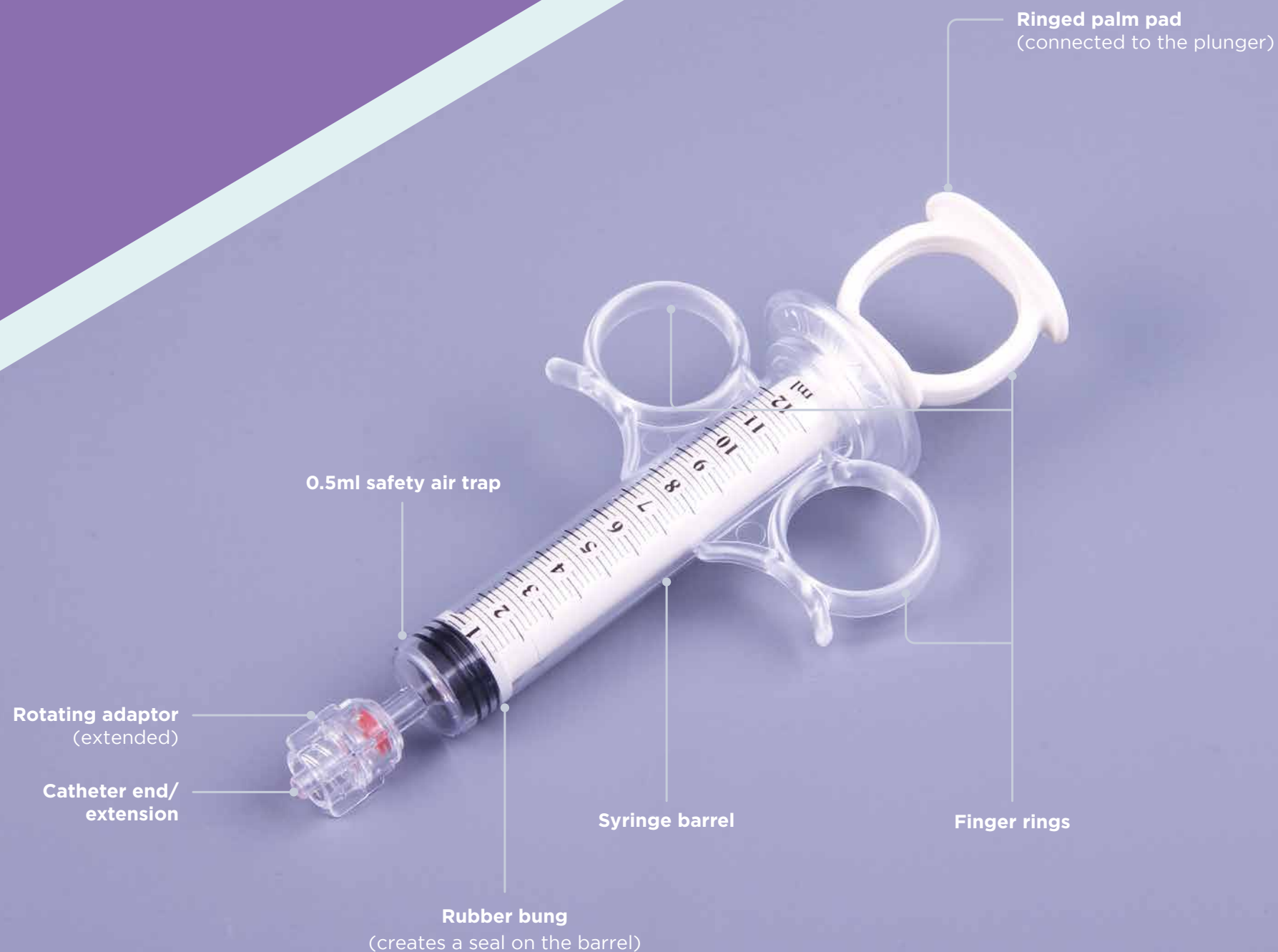
Raw Material Code: 10009/NAM
Sterile Order Code: H965640383011
Ports: 3
Handles: 3 (easy turn)
Handle Configuration: Right OFF
Pressure: 1379kPa (200 psi/14 bar) Static Pressure

Navilyst 3 Port Right OFF (High Pressure)

Raw Material Code: 80037301/DE
Sterile Order Code: H965700373011
Ports: 3
Handles: 3 (stiff turn)
Handle Configuration: Right OFF
Pressure: 3447kPa (500 psi/35 bar) Static Pressure



SYRINGES



For controlled aspiration and injection of fluids during procedure

Contrast Syringes - these are usually required for a cardiac angio/radiology procedure pack to allow the use of contrast to visualise the heart structure during the procedure.

A contrast syringe can be supplied on its own or as part of a kit including manifolds/contrast delivery systems (CDS) and pressure manometer line (PML).

Questions to ask

- ▶ What type of Syringe is required? 8/10/12ml?
- ▶ Finger Rings or Finger Grips?
- ▶ Fixed Luerlock or Rotating adaptor Luerlock?
- ▶ What is it connecting to?
 - ▶ Manifold? ▶ Catheter?
- ▶ Handle Type?
 - ▶ Palm Pad? ▶ Normal Pad?

i ▶ Play 10ml 3 ring syringe video

i ▶ Play 10ml standard syringe video

i ▶ Product codes

i ▶ Further information

i ▶ Popular syringes

SYRINGES

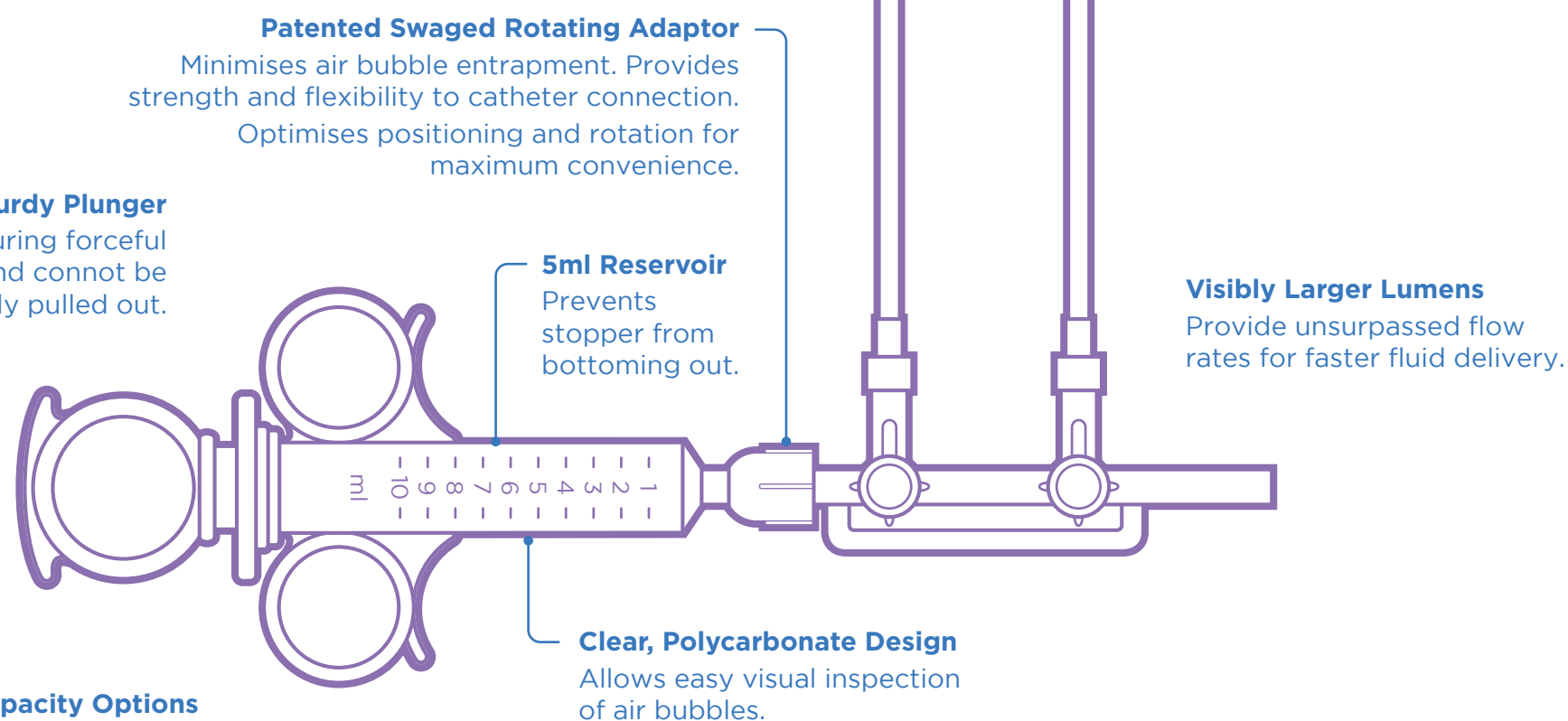


SYRINGES



SYRINGES

FURTHER INFORMATION



Multiple Handle and Capacity Options
Available in 8, 10, 12 and 20ml capacities. Achieve more forceful injections with handle options that maximise gripping power.



POPULAR SYRINGES

RADIOLOGY SYRINGE



Navilyst 10ml Polycarbonate Radiology Syringe

Raw Material Code: 80505103/A
Sterile Order Code: H965705051031 or K90/31
Capacity: 10ml
Safety Air Trap: 0.5ml
Colour Barrel: Blue
Handle Configuration: Standard round palm pad
Holding Method: Finger grips
Luer Fitting: Fixed male luerlock
Construction: Clear polycarbonate

CONTROL SYRINGE



Navilyst 10ml 3 Ring Polycarbonate Control Syringe

Raw Material Code: 6575/NAM
Sterile Order Code: K90/30
Capacity: 10ml (8ml and 12ml also available)
Safety Air Trap: 0.5ml
Colour Barrel: White
Handle Configuration: Palm pad / finger ring
Holding Method: Finger rings (3) / finger grips
Luer Fitting: Rotating adaptor male luerlock
Construction: Clear polycarbonate
Others Available:
8ml: 80084003/DE or H965700840030
12ml: 80087007/A or H965700870071

CONTROL SYRINGE



Navilyst 10ml Polycarbonate Control Syringe

Raw Material Code: 80097107/DE
Sterile Order Code: H965700971071
Capacity: 12ml
Safety Air Trap: 0.5ml
Colour Barrel: White
Handle Configuration: Palm Pad
Holding Method: Finger Grips
Luer Fitting: Rotating Adaptor male Luerlock
Construction: Clear Polycarbonate



LINES



Connection/extension lines

Kimal offers a wide and extensive range of cardiology/radiology connecting lines, for use with pressure monitoring, saline access and contrast access/injection, to fit your needs.

*contact kimal direct for more information

Questions to ask

- ▶ What are you connecting too? (transducer, contrast, saline, syringe)
- ▶ What length is required? (chamber and spike lines are standard at 180cm)
- ▶ What connections are required? (Male/Female, Male/Male, Female/Female)
- ▶ What Pressure is required?
- ▶ Normal or 1050- 1200psi?

i ▶ **Play red manometer line video**

i ▶ **Play blue stripe manometer line video**

i ▶ **Play non-vented chamber line video**

i ▶ **Play plain manometer line video**

i ▶ **Product codes**

i ▶ **Popular lines**

LINES



LINES



LINES



LINES



POPULAR LINES

PML LINE



PML - Pressure Monitoring Line

ID: 1.7mm
OD: 3mm
Pressure rating: N/A (pressure not recorded)
Description: Hard, thin, clear, constructed to any length required

HIGH PRESSURE LINES



High Pressure Line (Stiff Tube)

ID: 1.3mm
OD: 4.85mm
Pressure rating: Upto 1200psi
Description: Very hard, clear, constructed to any length required

CONTRAST LINE



Contrast Line

ID: 2.95mm
OD: 4.15mm
Pressure rating: Low (pressure not recorded)
Description: Soft, thin, clear, constructed to any length required

HIGH PRESSURE LINES



High Pressure Line (Braided Tube)

ID: 1.68mm
OD: 3.60mm
Pressure rating: Upto 1200psi
Description: Thin tube, reinforced braided construction, very flexible
Pre Cut Lengths: 30/60/75/90/120/200cm



STOPCOCKS

Used for the purpose of connecting various lines, drug admin, fluid admin during procedures,

Mainly used in Radiology but are used in Cardiology to make extra ports available when performing an Interventional procedure.



i ▶ Product codes

i ▶ Popular stopcocks

POPULAR STOPCOCKS

STOPCOCK



1 Way ON/OFF Stopcock (Normal-Medium Pressure)

Raw Material Code: 80015015/A

Sterile Order Code: K39/6/A

Ports: 1 Male and 1 Female

Handles: 1-360 Degree

STOPCOCK



3 Way OFF Stopcock (Normal-Medium Pressure)

Raw Material Code: 3023

Sterile Order Code: K90/18

Ports: 3-2 Female and 1 Rotating Male

Handles: 3 (easy turn) - 180 Degree

Handle Configuration: OFF

Pressure: 7239kPa (1050psi/72 bar) working pressure

Pressure: 1723kPa (250psi/17 bar) Closed pressure

FLOW SWITCH



Flow Switch (High Pressure)

Raw Material Code: 6170

Sterile Order Code: K39/5

Ports: 2

Handles: Slide Switch ON/OFF

Handle Configuration: ON/OFF Slide

Pressure: 7239kPa (1050psi/72 bar) working pressure

Pressure: 1723kPa (250psi/17 bar) Closed pressure (also K39/5/A is available as an alternative product, same configuration)



PROTECTION STATIONS



Transmission of blood borne pathogens is always a concern in the lab. Kimal / Navilyst Medical provides Closed Fluid Systems to help comply with OSHA guidelines and minimise exposure to blood borne pathogens.

- [i Play protection station video](#)
- [i Features and benefits](#)
- [i Product codes](#)
- [i Further information](#)
- [i Popular protection stations](#)

PROTECTION STATIONS



POPULAR PROTECTION STATIONS

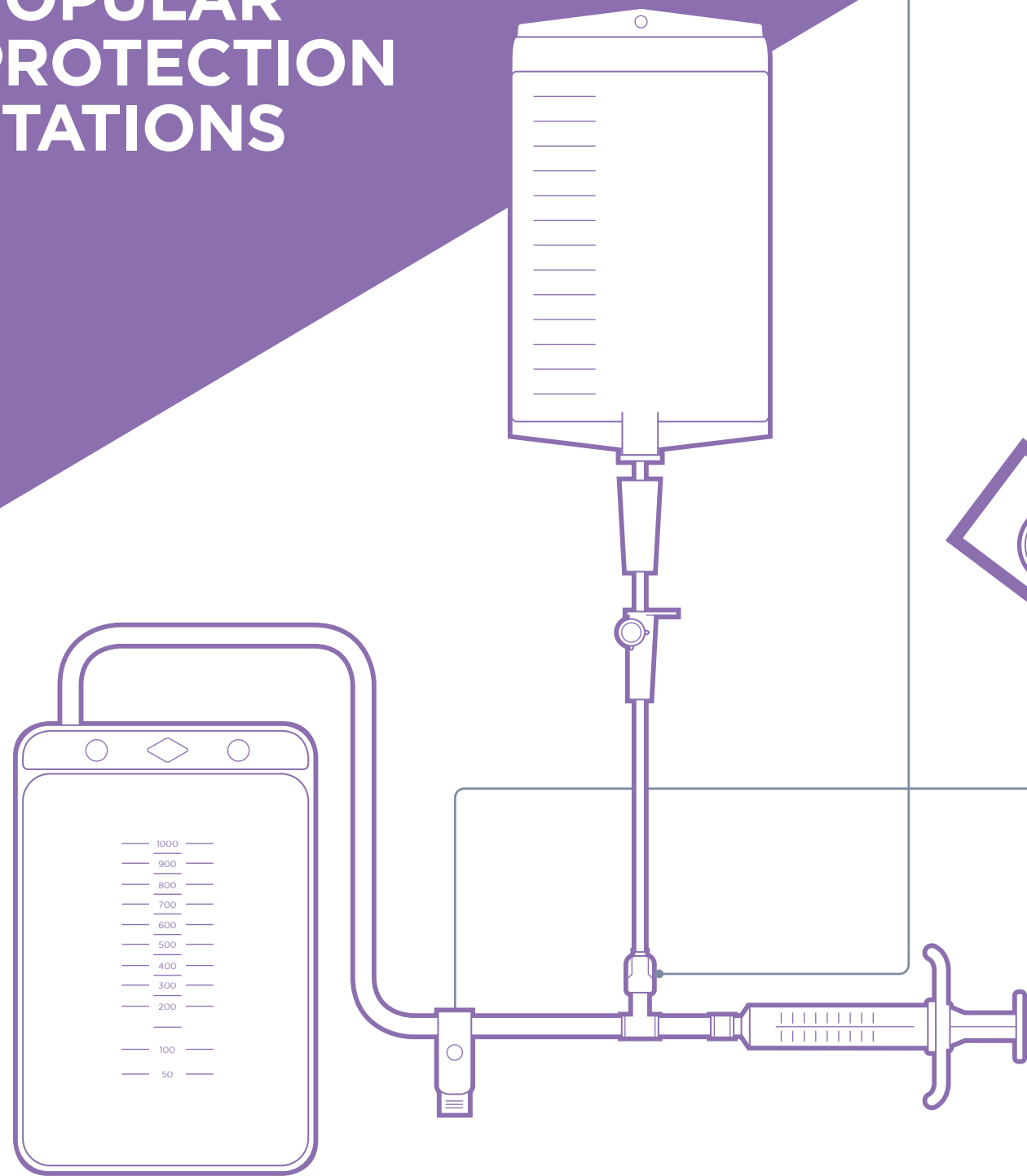
PROTECTION STATION®

Navilyst Non-Pressurised Protection Station

Raw Material Code: 8/NN/65660876 (Standard)

Raw Material Code: 8/NN/656608747 (Standard with Clip)

Sterile Order Code: H965640009341 or H96564000944

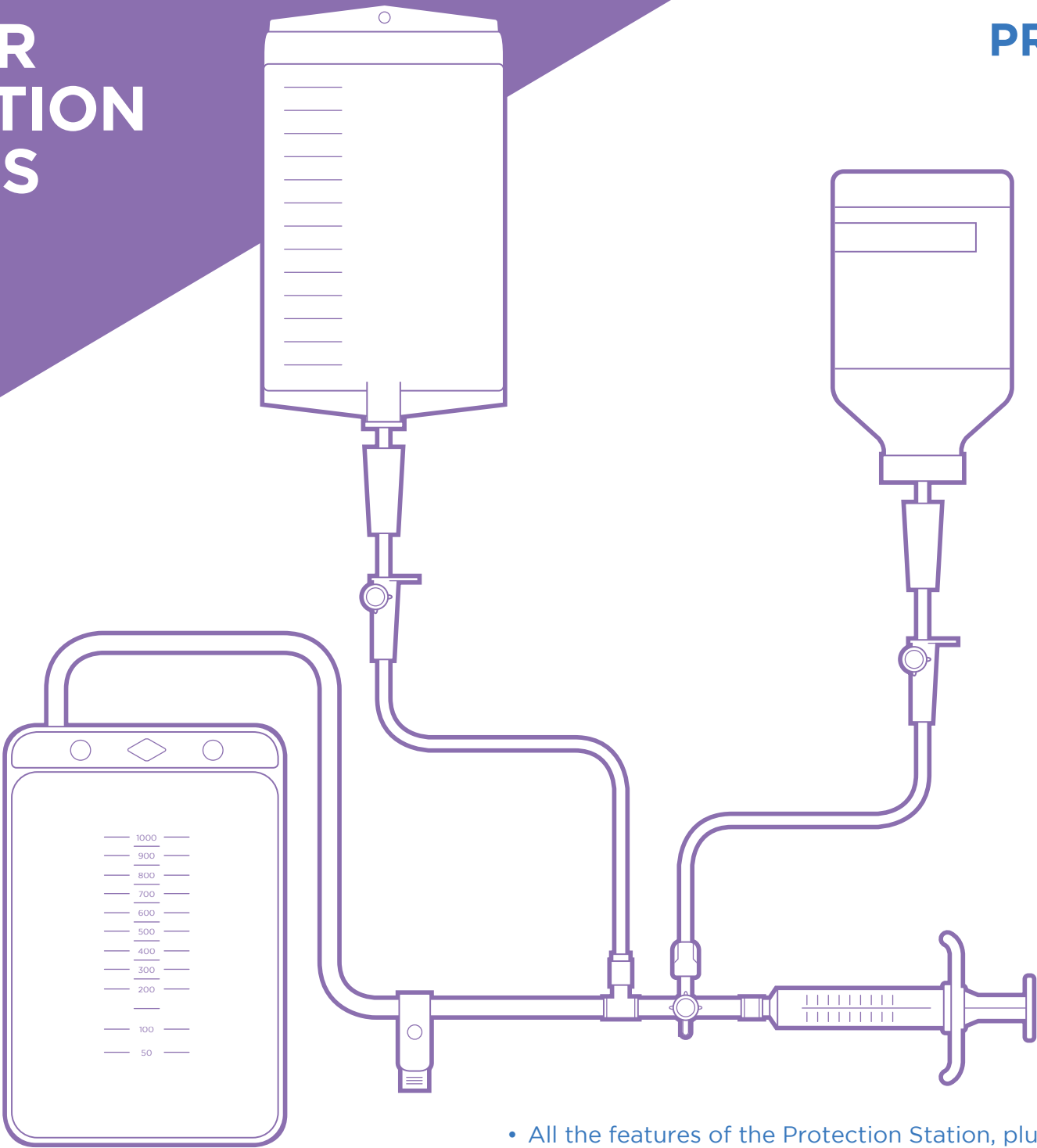


- Closed system to aspirate saline and to inject fluid waste
- Includes a 1,000ml closed Angio-Sac waste bag

Protection Station Plus®



POPULAR PROTECTION STATIONS



PROTECTION STATION® PLUS

Navilyst Non-Pressurised Protection Station

Raw Material Code: 8/NN/656206817

Sterile Order Code: H965640009351

Not typically used with a manifold

Closed system that administers saline
and contrast and collects waste

- All the features of the Protection Station, plus access to contrast with the turn of a stopcock handle
- All fluids are accessible from one port

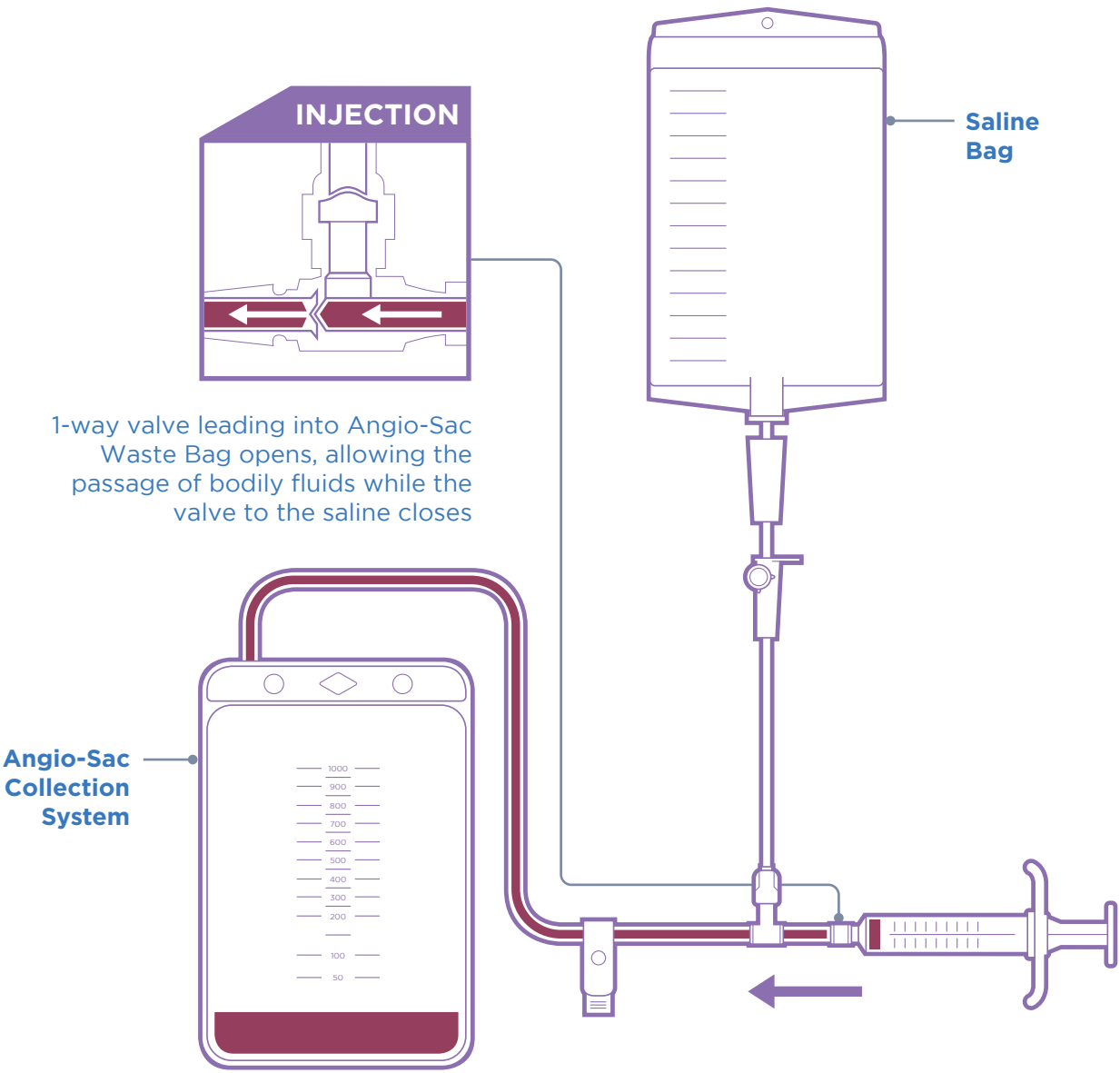
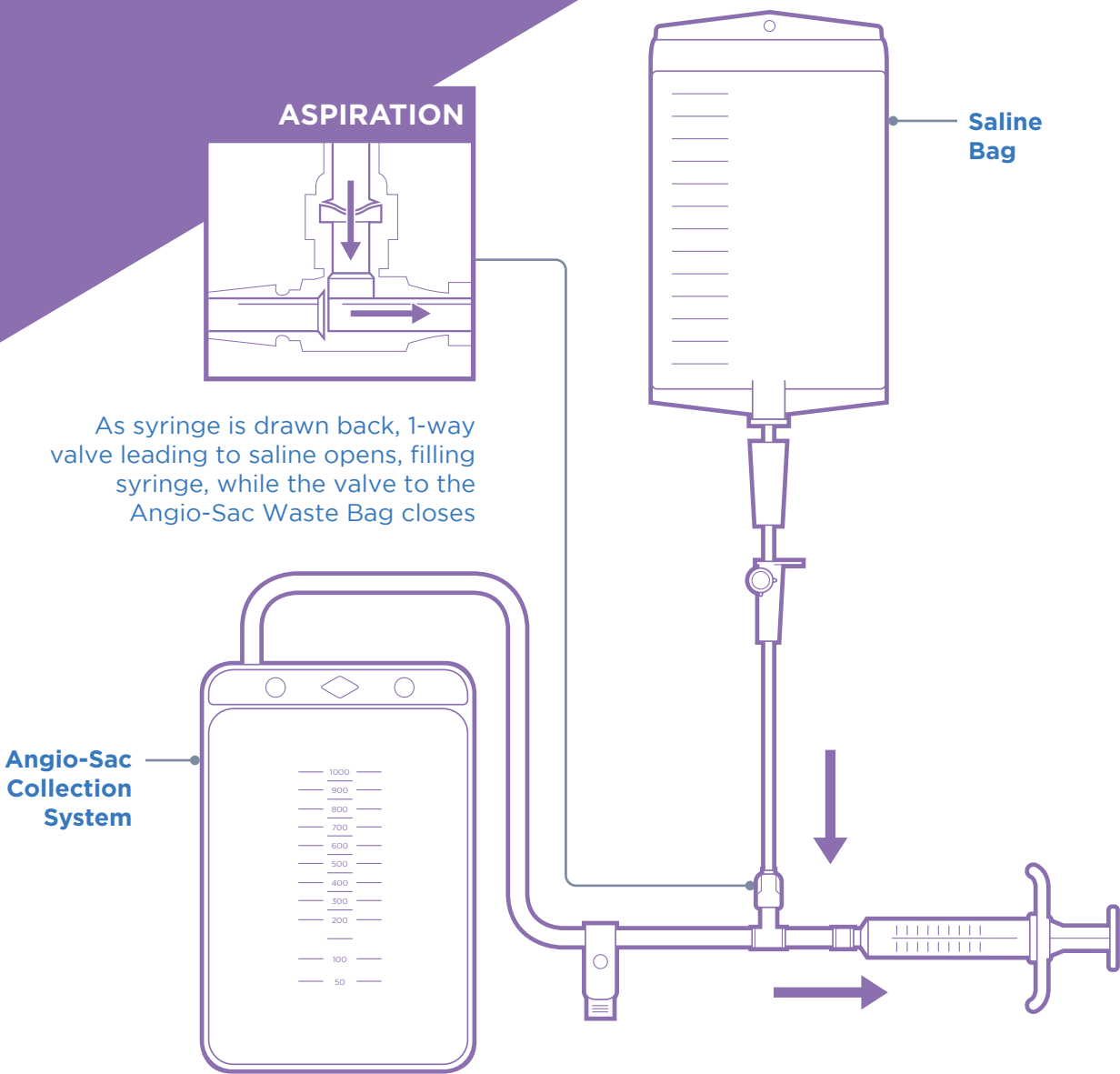
i Protection Station



PROTECTION STATIONS

FURTHER INFORMATION

HOW THE NAMIC PROTECTION STATION WORKS



i Key features and best practise solutions



PROTECTION STATIONS
FURTHER
INFORMATION

KEY FEATURES AND BEST
PRACTISE SOLUTIONS

Key Features

- Dual back check valve allows access to saline and waste
- Available for pressurised and non-pressurised saline sources
- Conveniently attaches to manifold with adapter

Best Practise Solution

The Occupational Safety and Health Administration (OSHA) estimates that 8,700 healthcare workers contract Hepatitis B Virus (HBV) on the job every year, with 200 deaths annually resulting from occupational exposure to this virus.

OSHA guidelines indicate: “All procedures involving blood or other potentially infectious materials shall be performed in such a manner as to minimise splashing, spraying, spattering and generation of droplets of these substances.”

In studies from England, splashing or spraying of blood occurred in 6.7% to 8.7% of angiographic procedures. Risk of blood contacts was greater for procedures lasting more than 30 minutes, as well as for procedures requiring more than two catheter exchanges and for thrombolysis and angioplasty.

Clearly, building protection into your system is the best way to prevent exposure.

 How the protection station works



PROTECTION STATIONS

FEATURES AND BENEFITS

FEATURE	BENEFIT
Easy To Use	Simple to setup, just connect saline and prime the system
Staff Protection	Complete close system, keeping waste materials safe and away from staff
Adds Efficiency	So quick and simple to use and also allows syringe flushing
Automacally Fills Syringes*	Using a pressurised system syringes can auto fill to save time
No More Splash Back	This system will not splash fluids back at the user, safety device
Stability	Safe and stable unlike waste bowls which can be dropped
Catheter Flushing	Can also be connected to the catheter to allow flushing during the procedure



FLUID DELIVERY LINES



Used for the purpose of connecting fluids via the line to a manifold for use during the procedure.

Contrast: Helps to display a visualisation of the heart structure when injected during the procedure.

Saline: usually heparinised used for Flushing/Cleaning during the procedure.

i Play vented chamber line video

i Play vented spike line video

i Product codes

i Popular fluid delivery lines

FLUID DELIVERY LINES



FLUID DELIVERY LINES



POPULAR FLUID DELIVERY LINES

VENTED SPIKE



180cm Vented Spike Line with Roller Clamp

Raw Material Code: 9865

Sterile Order Code: K70/32

Length: 180cm

Tube Dimensions: 2.95mm x 4.85mm

Flow Control: Roller clamp

Spike Type: Vented standard spike

VENTED CHAMBER



180cm Vented Chamber Line with Roller Clamp

Raw Material Code: 9860

Sterile Order Code: K1646/D

Length: 180cm

Tube Dimensions: 2.95mm x 4.85mm

Flow Control: Roller clamp

Spike Type: Vented chamber standard spike

Filter: Yes-15 micron

Fitting: Male luerlock

NON-VENTED CHAMBER



180cm Non - Vented Chamber Line with Roller Clamp

Raw Material Code: 9861

Sterile Order Code: K1646/C

Length: 180cm

Tube Dimensions: 2.95mm x 4.85mm

Flow Control: Roller clamp

Spike Type: Non-vented chamber standard spike

Filter: Yes-15 micron

Fitting: Male luerlock



CONTRAST CONTROL/SAVING DEVICE



The squeeze Contrast Controller is the clinically safe way to reduce contrast waste and your budget.

Its unique configuration lets you use one container of contrast media on multiple patient cases. And its proven microbial barrier prevents cross-contamination.

Cut costs with confidence with the Squeeze the most proven, most used and most trusted contrast management system.

i Play squeeze video

i Product codes

i Features and benefits

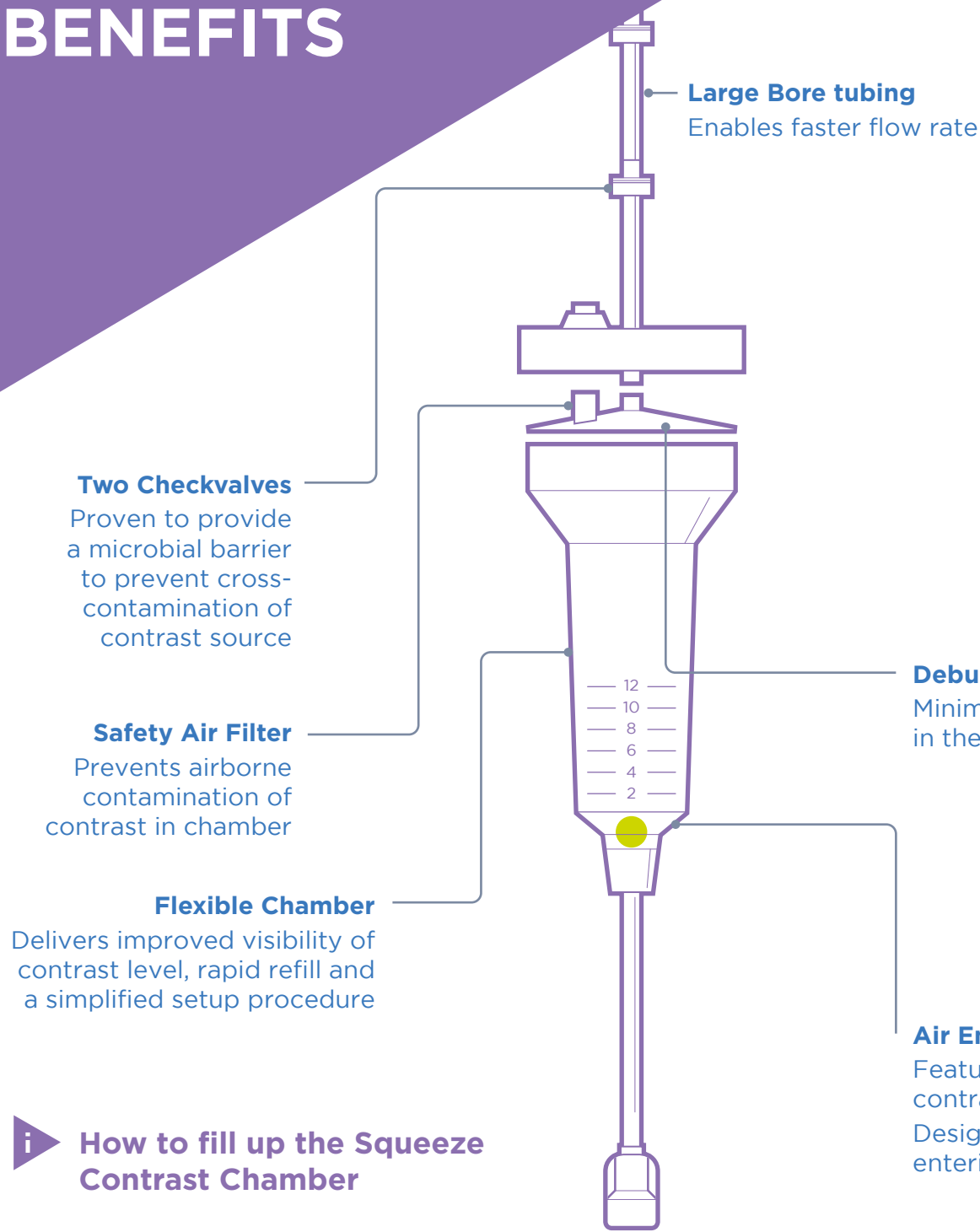
i Popular contrast control/saving devices

CONTRAST
CONTROL/SAVING
DEVICE



CONTRAST CONTROL/ SAVING DEVICE

FEATURES AND BENEFITS



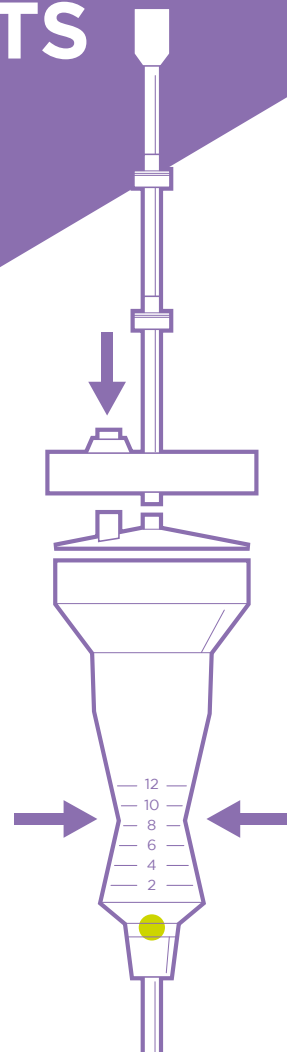
i How to fill up the Squeeze Contrast Chamber

FEATURE	BENEFIT
Two check valve tubing assembly with an in-line squeezable chamber	A proven microbial barrier to prevent contamination of contrast source
	Allows Cost Saving – multiple case can be done from the same Contrast Bottle (3 cases or 6hrs)
	Allows Time Saving – no need to respire for every case, just connect and Prime
	Allows Contrast controlling – physical pressure exerted when contrast source is depleted – Green Ball creates a vacuum
12ml chamber	Reduces contrast waste at end of procedure
Safety air filter	Prevents particulate airborne contamination of contrast in chamber
Fast-filling	Flexible chamber and unique debubbling dish allows quick aspiration of Contrast from the source



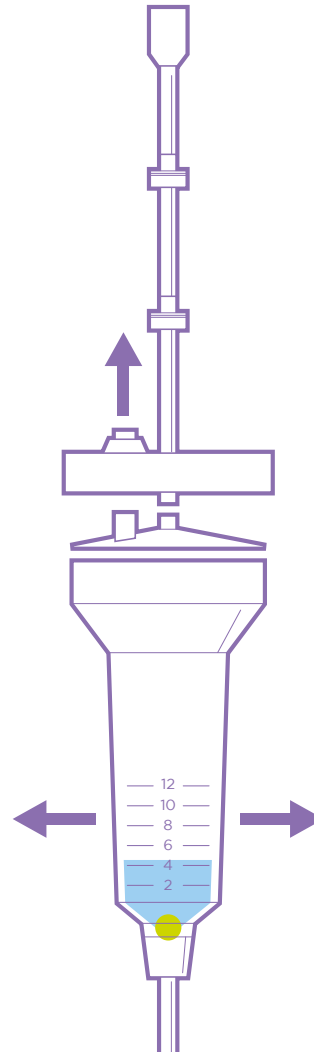
CONTRAST CONTROL/ SAVING DEVICE

FEATURES AND BENEFITS



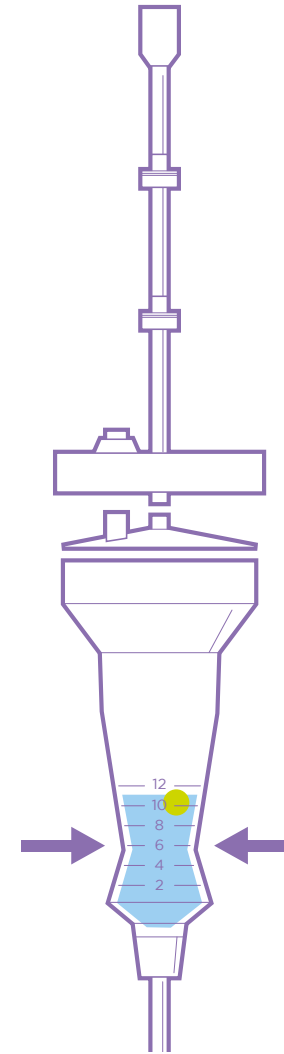
Step 1

While pressing and holding the green vent button, squeeze the chamber. Press firmly to evacuate air from the system.



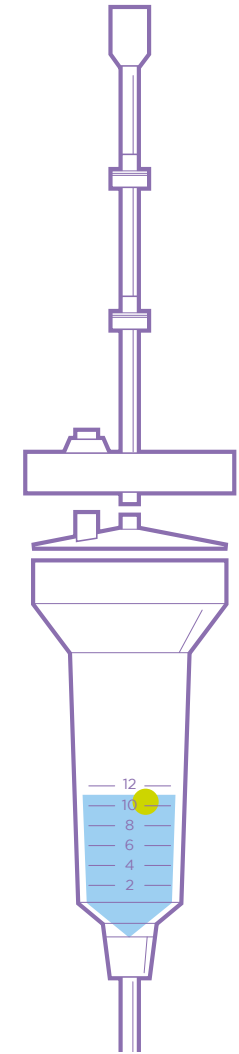
Step 2

Simultaneously release the chamber and the button. The chamber will fill with 10-12 ccs of contrast.



Step 3

If the green ball is sealed in the base of the chamber, squeeze the base firmly to dislodge the ball. The ball will float freely to the surface.



Step 4

Aspirate contrast through the tubing assembly. Debubble the system. The tubing assembly is now ready to use.

i Features and benefits



POPULAR CONTRAST CONTROL/SAVING DEVICE

SQUEEZE



Navilyst squeeze - Contrast control device

Raw Material Code: 85000435

Sterile Order Code: H749904004351

SPIKES



Kimal single use spike

Code: K70/50

SPIKES

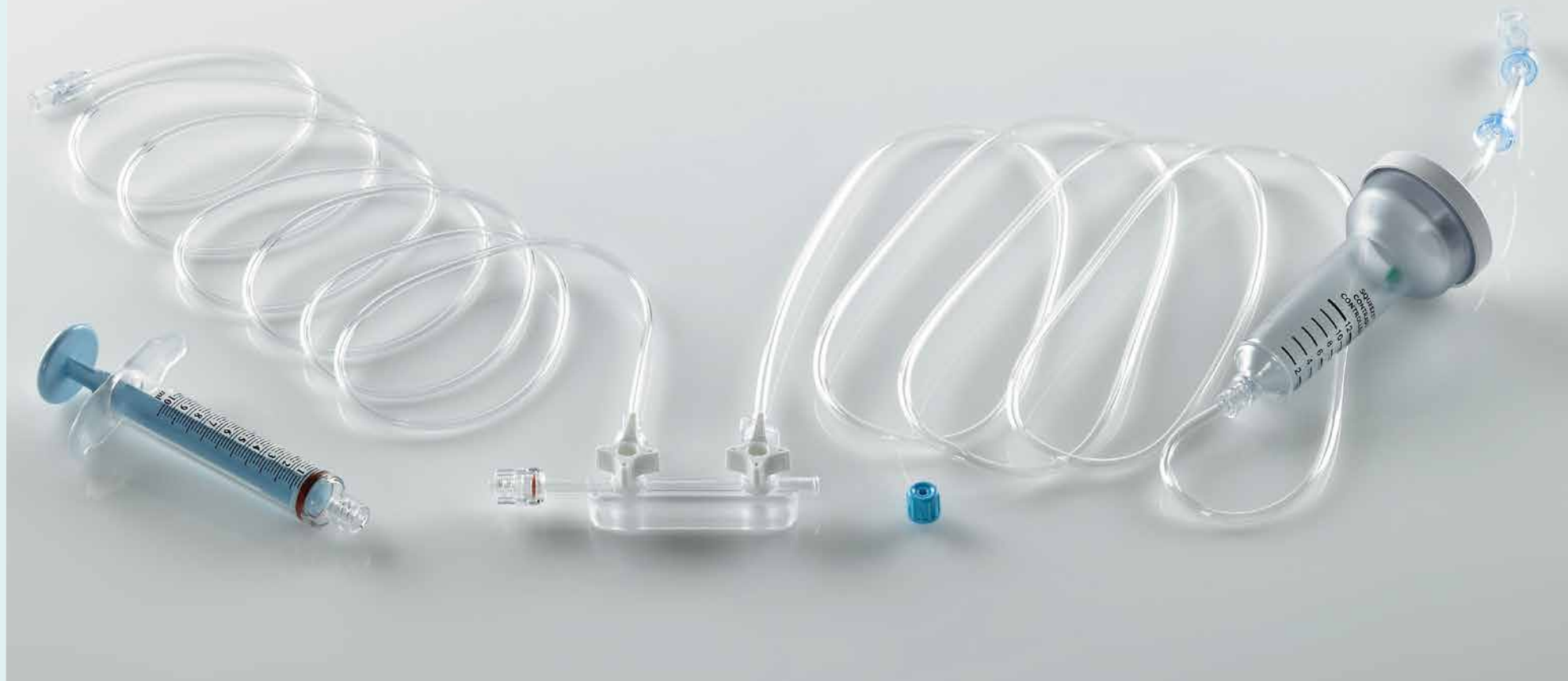


Navilyst re-usable (single bottle) spike

Code: H965904000391



STANDARD KITS



Kimal offer a select range of Navilyst Medical Pre-configured standard FM Kits. Along with full raw material capability to create any custom requirement.

Kimal are proud to be the UK and Ireland sole distributor for the exclusive Navilyst Range of both kits and raw material items*

*we also supply many other brands where requested.

Question to ask

- ▶ Who is the current supplier? (of either the procedure pack or FM)
- ▶ Have they tried Navilyst?
- ▶ Can you obtain a sample of their current FM setup? Or a procedure pack?
- ▶ Price?
- ▶ Annual usage?
- ▶ Standalone or inside packs?
- ▶ Possibility to change? (%)

Other things to note when talking FM kits

- ▶ Amount of ports required?
- ▶ Left or right handed use?
- ▶ Normal/med/high pressure?
- ▶ Manometer line length?
- ▶ Contrast delivery type?
- ▶ Syringe ml size, and syringe configurations? (7ml/8ml/10ml/12ml) (FR/FG/PP/NP)

i Play standard 2 port manifold kit video

i Play standard 2 port manifold kit with squeeze video

i Product codes

i Popular kits

STANDARD KITS



STANDARD KITS



POPULAR KITS

WITHOUT SQUEEZE



Navilyst standard 2 port manifold kit with pressure line and vented spike

Raw Material Code: 8/NN/656608725
Sterile Order Code: H749606608712
Syringe Capacity: 10ml (Blue Plunger, Standard Pad, Finger Grips, Fixed Male Luerlock)
Manifold: 2 Port Right OFF Normal Pressure
Pressure Line: 180cm
Contrast Delivery: Standard 180cm Vented Spike Line

Navilyst standard 3 port manifold kit with pressure line and vented spike

Raw Material Code: 8/NN/656608781

WITH SQUEEZE



Navilyst standard 2 port manifold kit with pressure line and squeeze contrast control system

Raw Material Code: 8/NN/656608724
Sterile Order Code: H9656060008121 or K26291
Syringe Capacity: 10ml (Blue Plunger, Standard Pad, Finger Grips, Fixed Male Luerlock)
Manifold: 2 Port Right OFF Normal Pressure
Pressure Line: 180cm
Contrast Delivery: Namic Squeeze Contrast Control Device

Navilyst standard 3 port manifold kit with pressure line and squeeze contrast control system

Raw Material Code: 8/NN/656608780



GLOSSARY OF TERMS

i ▶ General Cardiology Terminology

i ▶ FM Specific Terminology

GLOSSARY OF TERMS

GENERAL GLOSSARY OF TERMS

(some or all will be used in this manual)

TERM	MEANING
Aneurysm	Local dilatation of a blood vessel, usually an artery.
Aorta	Large artery rising out of left ventricle of heart and supplying blood to all of the body.
Aseptic Technique	A method of carrying out sterile procedures so that there is the minimum risk of introducing infection. Achieved by the sterility of equipment and a non touch technique.
Atheroma	Abnormal mass of fatty or lipid material with a fibrous covering, existing as a discrete, raised plaque within a blood vessel.
Atherosclerosis	Process in which fatty substances (cholesterol and triglycerides) are deposited in the walls of arteries.
AV Fistulas	Abnormal tangles of arteries and veins.
Cross-Contamination	The process where remnants from one patients procedure are present in fluids for the next. This must be prevented at all costs, and can be a contributing factor to hospital acquired infection.
Digital Subtraction Angiography (DSA)	Throughout the injection of contrast fluoroscopic images are obtained. Because of the high pressure of arterial blood flow, the contrast medium dissipates through the Patients system quickly and becomes diluted, so images must be obtained in rapid succession. In imaging departments, angiographic images are captured digitally, the ability to do so makes it possible to manipulate the information electronically allowing for a procedure known as digital subtraction Angiography (DSA). Because every image captured is comprised of pixels, computers can be used to manipulate the information in ways that enhance diagnostic information. One common approach is to electronically remove or (subtract) bony structures that otherwise would be superimposed over the vessels being studied, hence the name digital subtraction angiography.



FM Specific Terminology



GLOSSARY OF TERMS

GENERAL GLOSSARY OF TERMS

(some or all will be used in this manual)

TERM	MEANING
Fenestration	Access hole in drape.
Fluoroscopy	A type of X ray which uses real time imaging showing the X ray picture on a television monitor.
Inflation Device	This is a special high pressure syringe filled with half strength contrast. It has a psi pressure gauge mounted onto it so that the radiologist can monitor exactly how much pressure is being exerted onto the artery walls during the balloon inflation.
Occlusion	Complete obstruction/closure (vein or artery).
Percutaneous	When the vessel is entered through the skin.
Stenosis	Abnormal narrowing (vein or artery).
Stent	A stent is a metal mesh tube designed to keep a vessel open. It works similar to scaffolding. There are 2 different types of stent available; bare metal stents (uncoated) and drug eluting stents (these are coated with a drug to reduce the risk of the vessel narrowing again).



FM Specific Terminology



GLOSSARY OF TERMS

SPECIFIC GLOSSARY OF TERMS

(some or all will be used in this manual)

TERM	MEANING
Barrel	The outside area of a syringe, usually marked with “ml”.
Base Plate	Holder pole mounted for a transducer to sit in for Pressure Monitoring.
Chamber	A reservoir for fluids to gather, usually filtered to catch bubbles, can be vented or non-vented.
Compensator Manifold	Manifold with a built in transducer, must be Zero Balanced at Heart Level, once ZB has occurred a fixed PML is used to hold heart level, meaning the manifold can be moved anywhere and still ensure good pressure readings.
Contrast Syringe	A polycarbonate clear syringe specifically designed for use with contrast.
Contrast	A medical contrast medium (or contrast agent) is a substance used to enhance the contrast of structures or fluids within the body in medical imaging. It is commonly used to enhance the visibility of blood vessels.
Finger Grip	Relating to contrast syringes, there are hooks which enable holding of the syringe.
Finger Ring	Relating to contrast syringes, usually there are 3 of these to aid the holding of the syringe.
Fixed Luerlock	Usually a Male fixed Luerlock, female luerlock twists into the male then locks, any movement will cause any connected items to also move.
Handles	These are on the taps to allow the turning.
Inflation Device	Used to inflate a balloon catheter when deploying stents, can also be used without a stent just to open any stenoses, usually drug eluting in this case.
Luerlock	The connection on the end of a line/stopcock/manifold/syringe, these can male or female fitting.
Manifold	The Hub of the FM system, provides access to fluids (saline/contrast) along with Pressure.



General Cardiology Terminology



GLOSSARY OF TERMS

SPECIFIC GLOSSARY OF TERMS

(some or all will be used in this manual)

TERM	MEANING
Normal Pad	See Palm Pad, just a different design.
Palm Pad	Relating to contrast syringes, these are on the end of the plunger and aid pushing and pulling of the plunger for filling and emptying the syringe.
Perceptor Manifold	Manifold with a built in transducer, must be Zero Balanced at Heart Level and used at heart level throughout the procedure.
Plunger	The part of a syringe that is inside the barrel.
PML	Pressure Monitoring Line.
Port	These are the connection points on a Manifold.
Protection Station	Used for the safe disposal of contaminated fluids also a source for clean Saline.
Rotating Adaptor	Always on the catheter end of a manifold, also present on syringes/ stopcock and luerlocks and enables rotation at the joint without effecting any connected items.
Saline	is a general phrase referring to a sterile solution of sodium chloride (NaCl, more commonly known as table salt) in water, but is only sterile when it is to be placed parenteral (such as intravenously); otherwise, a saline solution is a salt water solution. The sterile solution is typically used for intravenous infusion
Slide Dome	Kimal alternative to SMITHS Logical system - transducer sets
Spike	Used to pierce a bag/bottle of source fluid. (Usually located on a drip stand)
Stopcock	A device used for connecting lines together or for Drug Administration.



General Cardiology Terminology



GLOSSARY OF TERMS

SPECIFIC GLOSSARY OF TERMS

(some or all will be used in this manual)

TERM	MEANING
Taps	These are either “ON” or “OFF” taps and control each port functions.
Transducer	Device used to take a mechanical signal from the catheter and converts to a digital screen readable signal/display.
Valve	One way cross contamination protection device.
Vent	Present on lines that require a controlled air escape for the perfusion of fluids from bottles.
Waste Bag	Used mainly attached to a valve system for a closed system for contaminated waste, or just normal procedure waste, fluids only.



General Cardiology Terminology



Introduction

Range overview

Glossary of terms

Competitor analysis

Appendix



RAW MATERIAL CODE	DESCRIPTION	SUPPLIER
80038303/DE	Manifold 3 Port Right ON NP	Manifold Navilyst
80038301/DE	Manifold 3 Port Right OFF NP	Manifold Navilyst
80038200/DE	Manifold 2 Right Port Off NP	Manifold Navilyst
80038202/DE	Manifold 2 Port Right ON NP	Manifold Navilyst
10009/NAM	Manifold 3 Port Right OFF NP	Manifold Navilyst
80038212/DE	Manifold 2 Port Left OFF NP	Manifold Navilyst
80037200/DE	Manifold 2 Port Right OFF HP	Manifold Navilyst
80038313/DE	Manifold 3 Port Left OFF NP	Manifold Navilyst
84038200/DE	Manifold 2 Port Right OFF NP (Star Handle)	Manifold Navilyst
80037202/DE	Manifold 2 Port Right ON HP	Manifold Navilyst
80037301/DE	Manifold 3 Port Right ON HP	Manifold Navilyst
84038202	Manifold 2 Port Right ON NP (Star Handle)	Manifold Navilyst
80338402	Manifold 4 Port Right OFF NP	Manifold Navilyst
10010/HALF	Manifold 3 Port Left OFF NP	Manifold Deroyal
10107/HALF	Manifold 3 Port Right ON HP	Manifold Deroyal
10003/HALF	Manifold 2 Port Right OFF NP	Manifold Deroyal
10009/HALF	Manifold 3 Port Right OFF NP	Manifold Deroyal
10001/HALF	Manifold 2 Port Right ON NP	Manifold Deroyal
10004/HALF	Manifold 2 Port Left OFF NP	Manifold Deroyal
10007/HALF	Manifold 3Port Right ON NP	Manifold Deroyal
10103/HALF	Manifold 2 Port Right OFF HP	Manifold Deroyal

 [Back to manifolds](#)

RAW MATERIAL CODE	DESCRIPTION	SUPPLIER
80097107/DE	Syringe 12ml Palm Pad With Rotator	Navilyst
80095107/DE	10cc Control Syringe With Rotator	Navilyst
6575/NAM	Syringe 10ml Control 3 Ring R/A	Navilyst
80087007/A	Syringe P.C 12ml L/L Control 3 Ring	Navilyst
80505103/A	Syringe P.C 10ml L/L Plunger Blue	Navilyst
40505123/A	Syringe 10ml Yellow	Navilyst
80084003/DE	E:Control Syringe 8ml with Fingerrings	Navilyst
6590	Syringe P.C 10ml L/L Cardio Control	Smiths
6162	Syringe P.C 12ml L/L Control 3 Ring	Merit

 [Back to syringes](#)

RAW MATERIAL CODE	DESCRIPTION	SUPPLIER
10MANFB/NS	Manometer Extension Line 10cm Blue Stripe Fixed LL	Kimal
10MANRB/NS	Manometer Extension Line 10cm Blue Stripe Rotating LL	Kimal
10MANRC/NS	Manometer Extension Line 10cm Clear Rotating LL	Kimal
10MANRR/NS	Manometer Extension Line 10cm Red Stripe Rotating LL	Kimal
30MANRR/NS	Manometer Extension Line 30cm Red Stripe Rot LL	Kimal
40MANFR/NS	Manometer Extension Line 40cm Red Stripe Fixed LL	Kimal
50MANFB/NS	Manometer Extension Line 50cm Blue Stripe Fixed LL	Kimal
50MANFC/NS	Manometer Extension Line 50cm Clear Fixed LL	Kimal
50MANRR/NS	Manometer Extension Line 50cm Red Stripe Rotating LL	Kimal
100MANRC/NS	Manometer Extension Line 100cm Clear Rot LL	Kimal
100MANFB/NS	Manometer Extension Line 100cm Blue Stripe Fixed LL	Kimal
100MANFC/NS	Manometer Extension Line 100cm Clear Stripe Fixed LL	Kimal
100MANFR/NS	Manometer Extension Line 100cm Red Stripe Fixed LL	Kimal
100MANRB/NS	Manometer Extension Line 100cm Blue Stripe Rot LL	Kimal
100MANRR/NS	Manometer Extension Line 100cm Red Stripe Rot LL	Kimal
130MANFR/NS	Manometer Extension Line 130cm Red Stripe Fixed LL	Kimal
130MANRB/NS	Manometer Extension Line 130cm Blue Stripe Rot LL	Kimal
150MANFR/NS	Manometer Extension Line 150cm Red Stripe Fixed LL	Kimal
150MANRC/NS	Manometer Extension Line 150cm Clear Rot LL	Kimal
180MANFC/NS	Manometer Extension Line 180cm Clear Fixed LL	Kimal
180MANRB/NS	Manometer Extension Line 180cm Blue Stripe Rotating LL	Kimal
180MANRR/NS	Manometer Extension Line 180cm Red Stripe Rotating LL	Kimal
200MANFB/NS	Manometer Extension Line 200cm Blue Stripe Fixed LL	Kimal
200MANFC/NS	Manometer Extension Line 200cm Clear Fixed LL	Kimal
200MANFR/NS	Manometer Extension Line 200cm Red Stripe Fixed LL	Kimal
200MANRB/NS	Manometer Extension Line 200cm Blue Stripe Rot LL	Kimal
200MANRR/NS	Manometer Extension Line 200cm Red Stripe Rot LL	Kimal
300MANFC/NS	Manometer Extension Line 300cm Clear Fixed LL	Kimal

 [Back to lines](#)

RAW MATERIAL CODE	DESCRIPTION	SUPPLIER
3034/MERIT	Stopcock 1 Way	MERIT MEDICAL
3024	Stopcock 1 Way 200 psi	MERIT MEDICAL
3012	Stopcock 1 Way 360° OFF	SMITHS MEDICAL
3022	Stopcock 1 Way 360° OFF H/F	SMITHS MEDICAL
80015015/A	Stopcock 1 Way 360° ON FLL- MLL	NAVILYST
3026	Stopcock 1 Way 360° ON FLL- MLL	COOK
80055017/A	Stopcock 1 Way 360° ON HP	NAVILYST
3021	Stopcock 1 Way 90° ON With Cap	Vygon
80055009/A	Stopcock 3 Way 180° HP OFF	NAVILYST
80015002/A	Stopcock 3 Way 180° OFF	NAVILYST
3030	Stopcock 3 Way 180° OFF H/F	COVIDIEN
80015000/A	Stopcock 3 Way 180° OFF H/F L/S	NAVILYST
3023	Stopcock 3 Way 180° OFF H/F R/A	SMITHS MEDICAL
3011/ARED	Stopcock 3 Way 180° OFF Red	COVIDIEN
3036	Stopcock 3 Way DiscoFix 360°	B BRAUN
3047	Stopcock 3 Way HP	MERIT MEDICAL
3123	Stopcock 3 Way OFF 435psi	PEROUSE MEDICAL
3046	Stopcock 3 Way ON 360°	BECTON DICKINSON
3025BLUE	Stopcock 4 Way 360° ON Blue	KIMAL
3025	Stopcock 4 Way 360° ON Natural	KIMAL
3025RED	Stopcock 4 Way 360° ON Red	KIMAL

 [Back to stopcocks](#)

RAW MATERIAL CODE	DESCRIPTION	SUPPLIER
0700/25	Tubing Braid 1.68 x 3.60 Cut 25cm	KIMAL
0700/30	Tubing Braid 1.68 x 3.60 Cut 30cm	KIMAL
0700/45	Tubing Braid 1.68 x 3.60 Cut 45cm	KIMAL
0700/50	Tubing Braid 1.68 x 3.60 Cut 50cm	KIMAL
0700/60	Tubing Braid 1.68 x 3.60 Cut 60cm	KIMAL
0700/75	Tubing Braid 1.68 x 3.60 Cut 75cm	KIMAL
0700/90	Tubing Braid 1.68 x 3.60 Cut 90cm	KIMAL
0700/100	Tubing Braid 1.68 x 3.60 Cut 100cm	KIMAL
0700/120	Tubing Braid 1.68 x 3.60 Cut 120cm	KIMAL
0700/125	Tubing Braid 1.68 x 3.60 Cut 125cm	KIMAL
0700/150	Tubing Braid 1.68 x 3.60 Cut 150cm	KIMAL
0700/200	Tubing Braid 1.68 x 3.60 Cut 200cm	KIMAL
717	Tubing 1.3 x 4.85 Angioflex 1200psi	KIMAL

(cut to desired length)

 Back to lines

RAW MATERIAL CODE	DESCRIPTION	SUPPLIER
85000435	Navilyst Contrast Control Squeeze System	NAVILYST
804270261	Vented Spike Line, Wide Bore Tubing 183cm With Roller Clamp	NAVILYST
9865	Vented Spike Line, 180cm With Roller Clamp	KIMAL
9860	Vented Chamber Line, 180cm With Roller Clamp	KIMAL
9861	Non-Vented Chamber Line, 180cm With Roller Clamp	KIMAL
9862	Blood Giving Set, 180cm (Red), With Blood Filter and Roller Clamp	CODAN

 [Back to fluid delivery lines](#)

NON-STERILE STANDARD
KITS & PROTECTION STATIONS

RAW MATERIAL CODE	DESCRIPTION	SUPPLIER
8/NN/656608725	Manifold 2 Port Namic with standard Vented Spike Line	NAVILYST
8/NN/656608724	Manifold 2 Port Namic with Squeeze	NAVILYST
8/NN/656608781	Manifold 3 Port Namic with standard Vented Spike Line	NAVILYST
8/NN/656608780	Manifold 3 Port Namic with Squeeze	NAVILYST
PROTECTION STATIONS		
8/NN/65660876	Namic Protection Station	NAVILYST
8/NN/656608747	Fluid Management With Clip Namic UK	NAVILYST
8/NN/656206817	Protection Station Plus	NAVILYST

NON-STERILE ACCESSORIES

RAW MATERIAL CODE	DESCRIPTION	SUPPLIER
81400021	Navilyst Y Adaptor (0.100") ID - Twist Version*	NAVILYST
81400025/DE	Navilyst Y Adaptor - Twist Version*	NAVILYST
81400300/DE	Namic Guidewire Torque Device (Neon)	NAVILYST
9025	Encore26 Balloon Inflation Device 26atm	NAVILYST
6124	E-Pass Hemostasis Valve - Push Pull Version**	KIMAL
6661	Insertion Tool 7cm (for use with Y-Adaptors Marked *)	KIMAL
6128	Insertion Tool 10cm (For Use with Y-Adaptors Marked **)	KIMAL
5091	2 Part Universal Guidewire Torque Device - White	KIMAL

 [Back to standard kits](#)

 [Back to protection stations](#)

HISTORY OF NAVILYST MEDICAL

- 1969** ▶ Founded as NAMIC® (North American Medical Instrument Corporation). First to offer reusable manifold to identify bubbles
- 1982** ▶ First to offer disposable polycarbonate manifolds due to increase concern of blood borne pathogens: AIDS, hepas, etc..
- 1985** ▶ First to offer “custom kits” (manifolds, syringes, fluid delivery lines, stopcocks, pressure monitoring all in one kit!!!)
- 1988** ▶ First to offer protection station to further protect against exposure risks
- 1990** ▶ First to offer disposable transducer to measure patient blood pressures
- 1991** ▶ First and only disposable transducer incorporated onto the manifold
- 1996** ▶ Acquired by Pfizer & merged with Schneider
- 1997** ▶ First to offer contrast controller with squeezable chamber (squeeze contrast controller)
- 1998** ▶ First to offer polycarbonate angiographic control syringes – replaced re-useable syringes (glass / metal)
- 1998** ▶ Schneider/NAMIC acquired by Boston Scientific
- 2004** ▶ Introduced NAMIC 8cc angiographic control syringe
- 2005** ▶ Introduced NAMIC waste container and temporary needle holder
- 2006/07** ▶ Acquired by a US venture company and renamed “Navilyst”
- 2011/12** ▶ Acquired by AngioDynamics