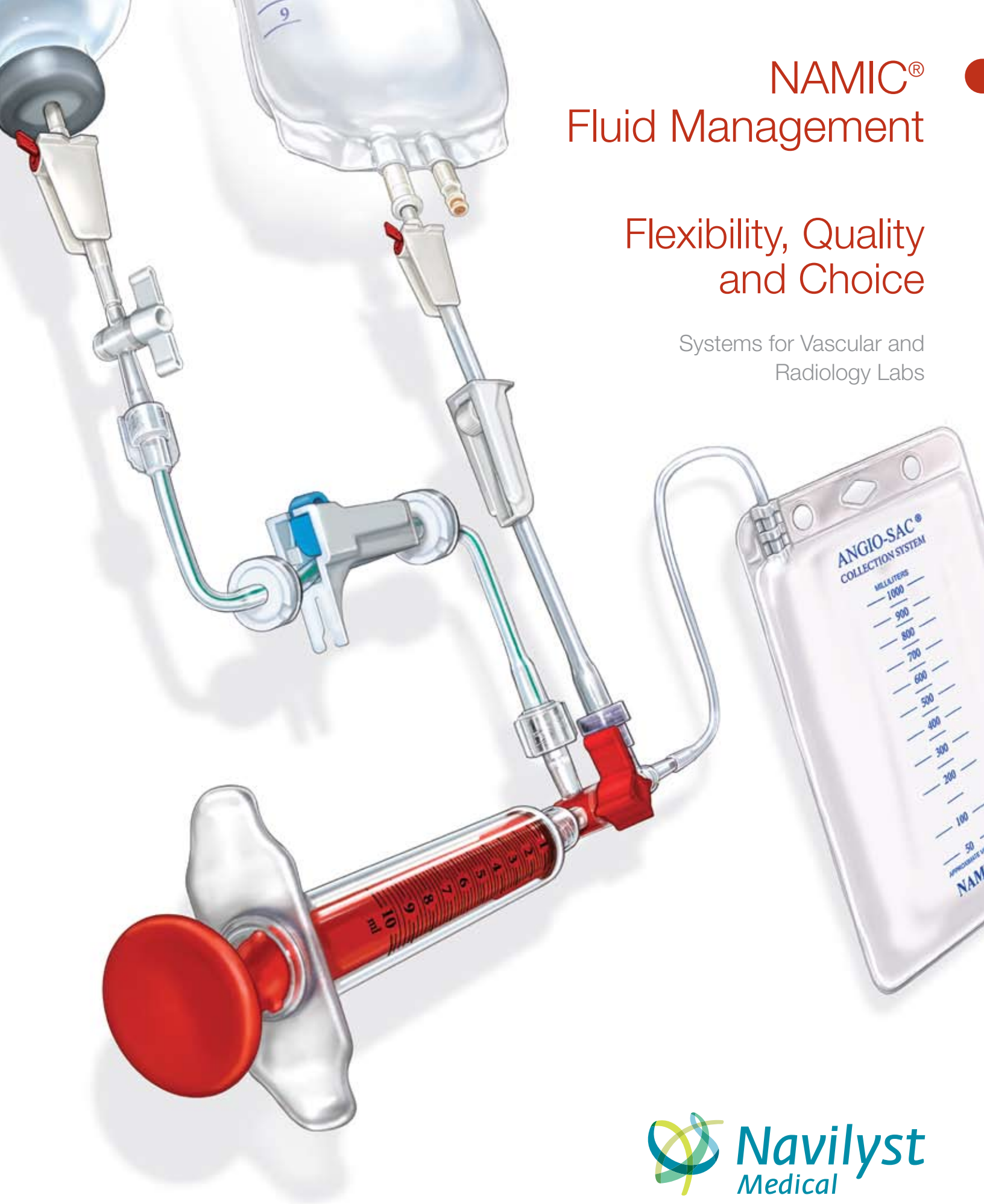
NAMIC®
Fluid Management

Flexibility, Quality and Choice

Systems for Vascular and Radiology Labs



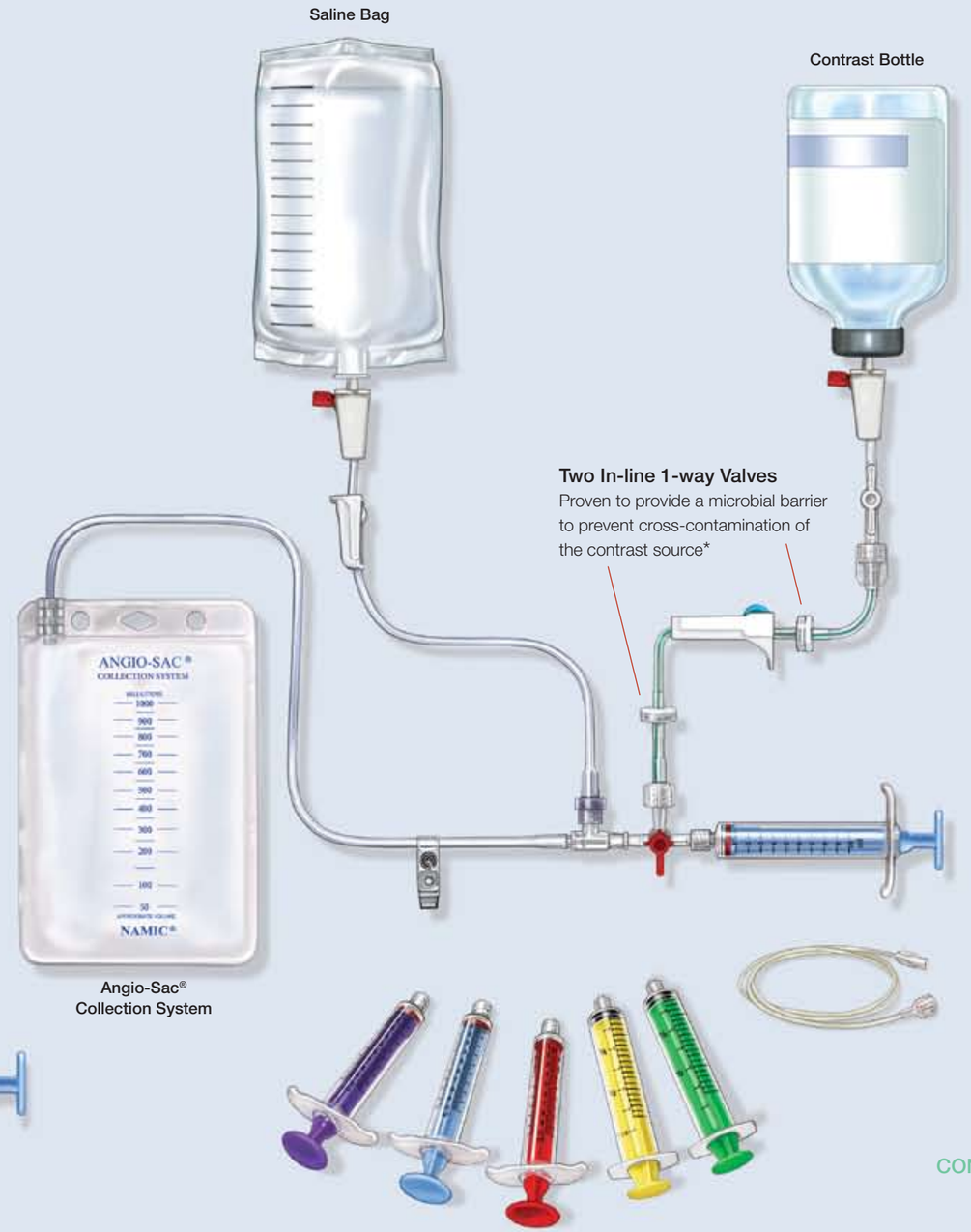
Navilyst Medical

Navilyst Medical

Flexibility. Quality. Choice.

Today's vascular and radiology labs care for patients with more diverse procedures than ever before. So more than ever, you need devices you can trust and that perform consistently. NAMIC® Fluid Management Products from Navilyst Medical are designed to meet the true challenges of your practice. Since 1969, NAMIC Products have been the most widely used in the industry. With features that answer clinical and operational needs, our products are designed to bring flexibility, quality and choice to your angiographic procedures.

Optimized System for Vascular and Radiology Labs



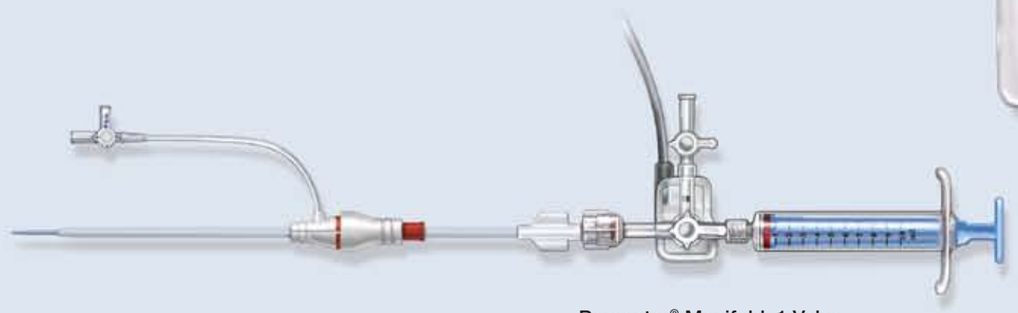
Protection Station® Plus with Contrast Management
Demonstrated to prevent cross-contamination while reducing contrast waste*

One source, multiple patients
Multiplies savings by enabling one contrast container to be used per spike, up to six hours

Two In-line 1-way Valves
Proven to provide a microbial barrier to prevent cross-contamination of the contrast source*

10 ml Radiology Control Syringe
Clear polycarbonate design allows for visual inspection of air bubbles

Angio-Sac® Collection System



Perceptor® Manifold, 1 Valve

Table of Contents

* Studies showed sterile results when the contrast was challenged with motile bacterium (*Pseudomonas aeruginosa*); endospore-forming bacteria (*Bacillus subtilis*); and virus (Bacteriophage Phi-X174).

Proven Protection. Best Practice Solution. Easy to Use.

Transmission of bloodborne pathogens is always a concern in the lab. Navilyst Medical provides Closed Fluid Systems to help your lab comply with OSHA guidelines and minimize exposure to bloodborne pathogens.

Choose the Level of Protection That's Right for You

Angio-Sac® Collection System

- 1,000 ml closed Angio-Sac Waste Bag

Protection Station®

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

Protection Station® Plus

- 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

Protection Station Plus with Contrast Management

- Two 1-way check valves designed to provide a microbial barrier to prevent cross-contamination of contrast source*
- Ideal for labs doing 3-4 or more cases per day requiring contrast
- Allows one contrast source for multiple cases
- Reduces contrast waste and saves money

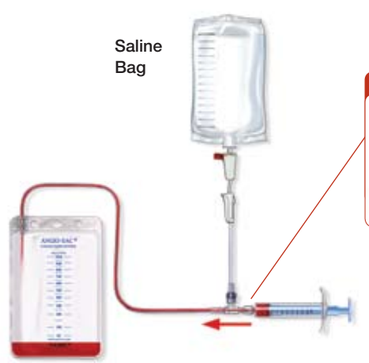
How the NAMIC Protection Station Works

Key Features

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

Aspiration

As syringe is drawn back, 1-way valve leading to saline opens, filling syringe, while the valve to the Angio-Sac Waste Bag closes



Injection

1-way valve leading into Angio-Sac Waste Bag opens, allowing the passage of bodily fluids while the valve to the saline closes

Best Practice Solution

The Occupational Safety and Health Administration (OSHA) estimates that 8,700 healthcare workers contract Hepatitis B Virus (HBV) on the job each year, with 200 deaths annually resulting from occupational exposure to this virus.[1]

OSHA guidelines indicate: "All procedures involving blood or other potentially infectious materials shall be performed in such a manner as to minimize splashing, spraying, spattering and generation of droplets of these substances."[2]

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.[1]

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

* Studies showed sterile results when the contrast was challenged with motile bacterium (*Pseudomonas aeruginosa*); endospore-forming bacteria (*Bacillus subtilis*); and virus (Bacteriophage Phi-X174).

1. Hansen, M. Bloodborne Pathogens and Procedure Safety in Interventional Radiology. *Seminars in Ultrasound, CT and MRI* 1998;19(2):209-214.
2. U.S. Department of Labor. OSHA regulations (standards - 29 CFR) bloodborne pathogens. 1910.1030.

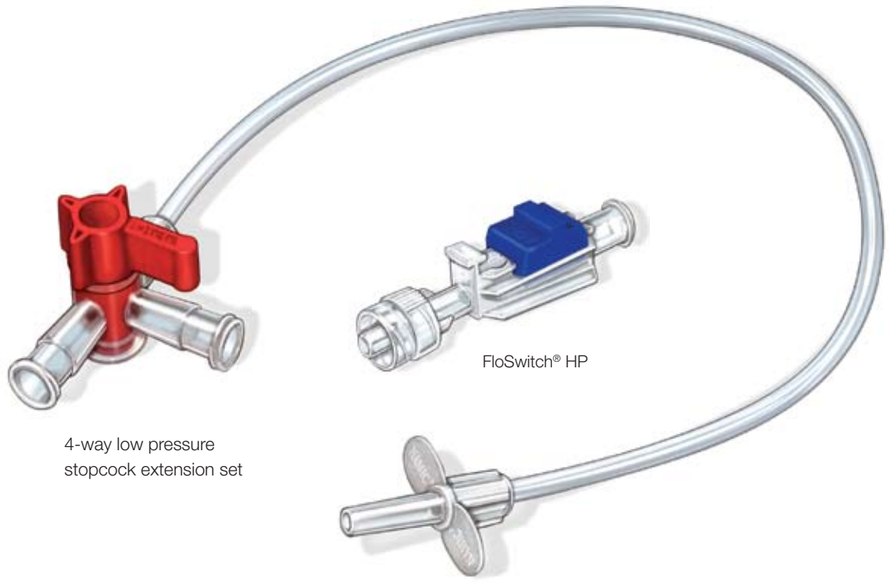
Choice. Quality. Reliability.

NAMIC Stopcocks are designed with the features that matter in your lab: easy-turning handles, a textured, non-slip surface, precision-engineered luer fittings, large lumens and a durable and clear polycarbonate body. They bring quality and reliability to your lab.

Ergonomic Handle Design
• Facilitates easy grip and valve rotation

Extensive Line
• Many options available

Wide Range of Pressure Ratings
• 200 (low), 400 (medium) and 1,050 (high) psi



4-way low pressure stopcock extension set

FloSwitch® HP

1-way high pressure with fixed male

1-way low pressure with rotating collar

3-way low pressure with fixed male

3-way high pressure with rotating adaptor

3-way medium pressure with rotating collar

4-way low pressure with rotating collar

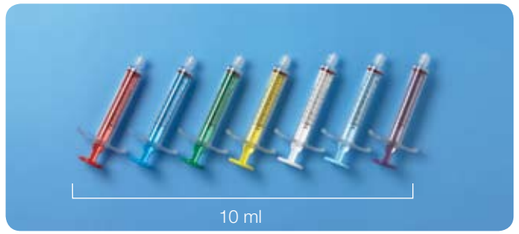
Adult arterial extension set with 3-way stopcock

Proven. Tested. Trusted.

Navilyst Medical offers a broad line of syringes for radiology labs, delivering smooth aspiration, controlled injections and superior flow rates. Navilyst Medical is injecting high-quality performance every day.

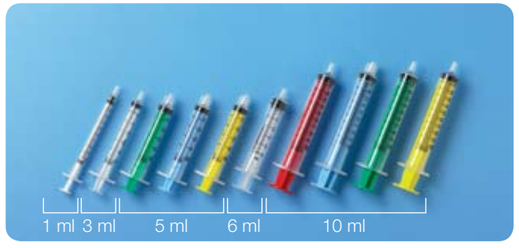
Choose from Polycarbonate and Polypropylene Designs

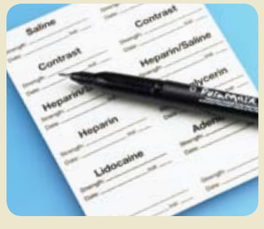
Radiology Control Syringes
Available with and without 0.5 ml reservoir



Polycarbonate Syringes
Clear polycarbonate, with colored piston options

Polypropylene Syringes
Male luer lock (MLL) or male slip tip (MST), colored pistons, wide range of size options from 1 ml to 60 ml





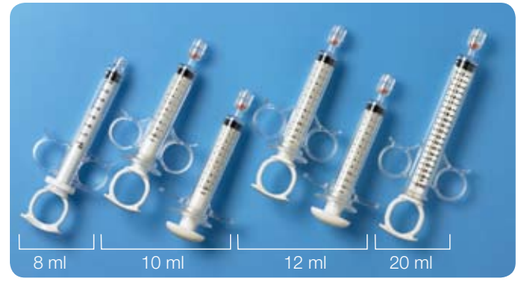
The Pen and Medication Label Set
- Polypropylene labels are pre-printed for convenience
- Blank labels included for other medications
- Smear-resistant permanent marker for use in the sterile field

Joint Commission Guidelines
Navilyst Medical fully complies with Joint Commission guidelines

"Label all medications, medication containers (e.g., syringes, medicine cups, basins) or other solutions on and off the sterile field in perioperative and other procedural settings."[1]

"The label should be prepared and applied at the time of medication or when solution is prepared."[2]

Angiographic Control Syringes
Male luer lock (MLL) and rotating adaptor (RA) with and without 0.5 ml reservoir, finger ring, finger grip, palm pad and thumb ring



1. Joint Commission on Accreditation of Healthcare Organizations (JCAHO) 2006 Ambulatory Care and Office-based Surgery National Patient Goal: Improving the Safety of Using Medications, Section 3D.
2. FAQ 2006 National Patient Safety Goals, http://www.jointcommission.org/ (7 December 2006).

NAMIC® Perceptor® DT Disposable Transducers

100% Tested. Advanced Technology. Accurate Results.

Perceptor DT Disposable Transducers from Navilyst Medical are designed specifically for interventional radiology labs and represent state-of-the-art technology. The rigors of the lab demand consistent accuracy, and Perceptor DT Transducers are designed to deliver the first time, every time.

100% Tested
Every transducer is tested for accuracy

Clear Fluid Pathway
Enables quick and easy priming, debubbling and visualization

Advanced Diagnostic Tool
Provides precise waveform fidelity

Reliable Connections
Keyed cable connectors provide secure connection

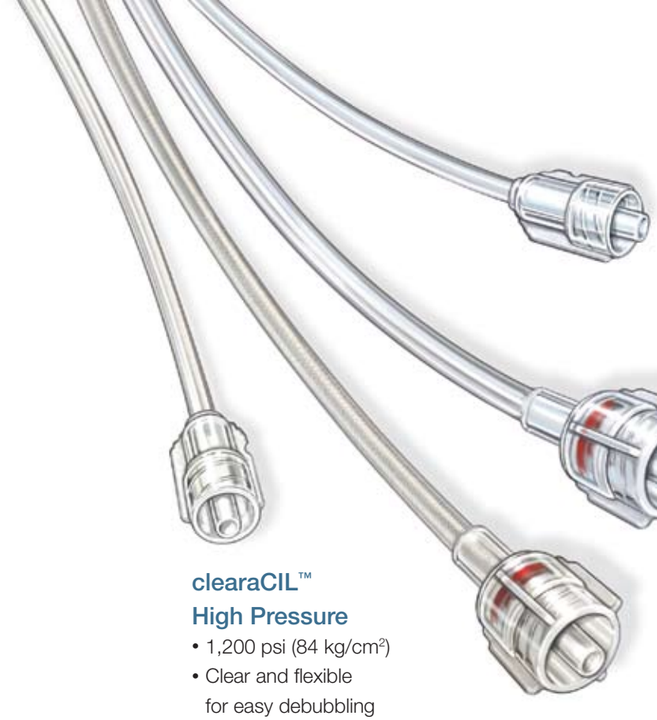
Flexible cable designed not to coil back or interfere with procedure

Laser-trimmed Resistors
Ensures more accurate waveforms

NAMIC® Contrast Injection Lines

Strong. Flexible. Secure.

NAMIC Contrast Injection Lines are configured for both low- and high-pressure injections. They feature the security of injection-molded fittings, clear tubing for easy bubble detection and secure catheter connections. Your choice for flexibility and strength is clear.



LPCIL (Low-pressure Contrast Injection Line)
- 500 psi (35 kg/cm²)
- Ultra-clear, single-layer PVC tubing for easy debubbling
- 0.089" ID

HPCIL (High-pressure Contrast Injection Line)
- 1,000 psi (70 kg/cm²)
- Ultra-clear, single-layer PVC tubing for easy debubbling
- 0 .089" ID

clearaCIL™ High Pressure
- 1,200 psi (84 kg/cm²)
- Clear and flexible for easy debubbling and positioning
- Dual-layer nylon and urethane for added strength and clarity
- 0.071" ID

flexCIL® High Pressure
- 1,200 psi (84 kg/cm²)
- Braided polyurethane for extra strength and maximum flexibility
- 0.071" ID

NAMIC Angiographic Core Wires

Flexible. Uniquely Shaped. Proven Reliable.

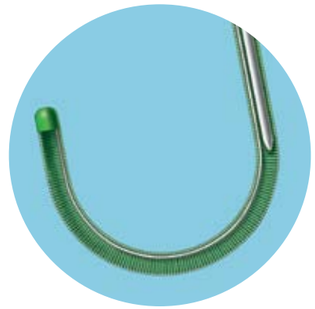
Our core wires provide solid support for diagnostic catheters, and feature flexibility and a unique J-tip shape to assist with lengthy procedures.

Memorable "J"
Smooth "J" shape designed for easy, atraumatic advancement

Memory that provides stamina for lengthy procedures and tortuous anatomy

Enhanced Flexibility
Firm, solid core lends the right amount of body and support

Tip flexibility facilitates finger-straightening and passage through tortuous anatomy



- Available in J-tip or straight
- Fixed core or movable core
- 60 cm to 260 cm length
- 0.018" to 0.038" OD

Proven Quality. Trusted Performance. Accessories to Count On.

When quality and performance are essential, count on Navilyst Medical. From the market's largest lumen Y-adaptors to the inflation device you'll want when the pressure is on, each product is designed for confidence. It's quality you can trust every day.

The Encore® 26 Inflation Device*
- 0-26 atm capability

Angled Face Gauge
Easy to read for left- or right-handed users

Ergonomic Design
Fits any hand size

Clear Polycarbonate Syringe
Ensures accurate inflations up to 20 ml volume

Durable Locking Mechanism
Reliable for multiple inflations

Quick Latch Release Design

ARIA™ Inflation Device*
- 0-22 atm
- 12 ml barrel volume
- Luminescent gauge
- Angled face gauge

* Only available in kits.

Optional NAMIC® Interventional Accessories

Option 125™ Y-Adaptor
- 0.125" straight-through lumen (3.18 mm, 9.5 F)
- Largest lumen we offer for best clearance
- Intermediate threading for rapid closure
- Elongated body style

Large Bore Y-Adaptor
- 0.113" straight-through lumen (2.87 mm, 8.6 F)
- Fine threading for precise hemostasis control

Original Y-Adaptor
- 0.100" (2.54 mm, 7.6 F) straight-through lumen
- Intermediate and fine threading options available

Gateway™ Y-Adaptor
- 0.118" (2.99 mm, 9 F) internal through lumen
- Unique hemostatic valve for proper hemostasis with smooth catheter wire movement

Option 125 Tri-Adaptor
- 0.125" main/0.110" side
- Largest lumen we offer for best clearance

Original Tri-Adaptor
- 0.100" main/0.093" side
- Intermediate threading

NAMIC Insertion Tool
- Allows for quick and easy placement of guidewire through Y-adaptor
- Clear hub
- 0.018" ID

Avenue® Insertion Tool
- Allows for quick and easy placement of guidewire through Y-adaptor
- 0.018" ID

NAMIC Torque Device
- Glows in the dark for easy visualization
- Secure textured grip for torque control
- Accommodates 0.010" to 0.018" wires

TD2® Torque Device
- Large, easy-to-grip handle
- Textured grip for torque control
- Accommodates 0.010" to 0.018" wires

The Grip™
- Large torque device for easy handling
- White disk slides easily over wire for proper compression
- Accommodates 0.014" to 0.018" wires

NAMIC Essentials™ Kit Includes:
- TD2 Torque Device
- Avenue Insertion Tool
- Gateway Y-Adaptor

Complete. Ready-to-Use. Trusted for Safety.

Navilyst Medical delivers what you need to keep your lab safe and productive—all in a convenient kit that goes to work straight from the shelf. There's no need to inventory multiple products. Streamlined kit set-up is fast and easy, replacing bowls used to dispose of contaminated body fluids. Each kit comes complete with the components necessary to reduce exposure to pathogens and manage fluids.

Closed System Kits with Contrast

Option 1
- Protection Station® Plus System with HP Stopcock
- 10 ml Radiology Control Syringe
- 5 Polypropylene Syringes
- 48" flexCIL® Contrast Injection Line

Option 2
- Protection Station Plus System with HP Stopcock
- 10 ml Radiology Control Syringe
- 48" flexCIL Contrast Injection Line

Option 3
- Protection Station Plus System with HP Stopcock
- 10 ml Radiology Control Syringe

Option 4
- Protection Station Plus System with HP Stopcock

Closed System Kits without Contrast

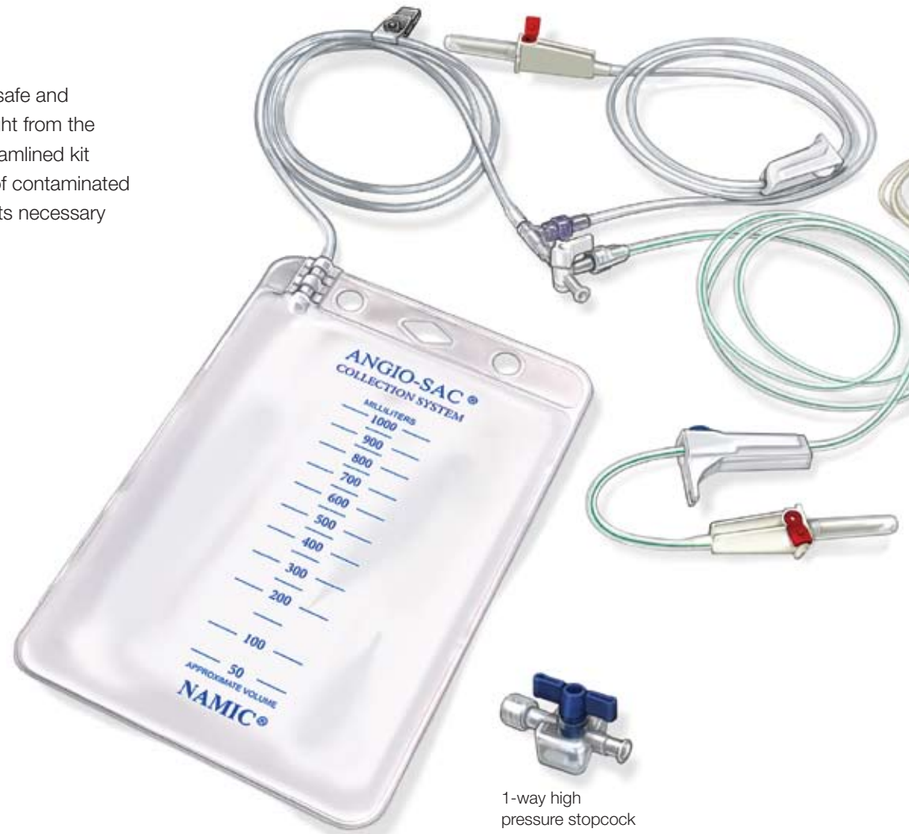
Option 1
- Protection Station System with HP Stopcock
- 10 ml Radiology Control Syringe
- 5 Polypropylene Syringes
- 48" flexCIL Contrast Injection Line

Option 2
- Protection Station System with HP Stopcock
- 10 ml Radiology Control Syringe
- 48" flexCIL Contrast Injection Line

Option 3
- Protection Station System with HP Stopcock
- 10 ml Radiology Control Syringe

Option 4
- Protection Station System with HP Stopcock

Choose the Standard Kit That's Right for You



1-way high pressure stopcock

Known for Flexibility. Trusted. Designed for Performance.

Navilyst Medical offers a wide range of accessories designed to make your IR lab a safer place to work. OSHA guidelines recommend that "all procedures involving blood or other potentially infectious materials shall be performed in such a manner as to minimize splashing, spraying, spattering and generation of droplets of these substances." You can count on Navilyst Medical to help keep your lab in compliance.

Scalpels

Vascular Access Needles

Hypodermic Needles

Temporary Needle Holder

Waste Container

Other Accessories

Scissors
Gauze
Forceps
Table Covers
Patient Drapes
Fluoroscopic Covers

Striped Delivery Sets and Pressure Monitoring Lines

Available in a range of colors to improve staff consistency

For ordering information or to learn more about the complete NAMIC® Fluid Management product line, visit

www.navilystmedical.com

or contact your Navilyst Medical Territory Manager

ABBREVIATED DIRECTIONS FOR USE

Refer to package insert provided with these products for complete Instructions for Use, Contraindications, Potential Complications, Warnings and Precautions prior to using these products. If Navilyst Medical, Inc. product is being used in conjunction with another manufacturer's product, user must also read and follow that manufacturer's Instructions for Use.

CAUTION: Federal Law (USA) restricts these devices to sale by or on the order of a physician.

NAMIC® PERCEPTOR® MANIFOLD

INTENDED USE/INDICATIONS FOR USE: Physiological pressure transducers are utilized during invasive pressure monitoring, catheterization procedures and fluid delivery.

WARNINGS: This product does not incorporate protection from accidental over pressurization. Over pressurization may permanently impair accuracy of the device. Do not exceed the following pressures when using this device - Main lumen: Medium Pressure Manifolds – 1379 kPa (200 psi/14bar) Static pressure; High Pressure Manifolds – 3447 kPa (500 psi/35 bar) Static pressure; Transducer Side Port – 41 kPa (6 psi/300 mmHg).

ANGIOGRAPHIC WIRES

INTENDED USE/INDICATIONS FOR USE: Angiographic guidewires are available with or without PTFE coating and with or without Heparin coating and are intended for use in the percutaneous introduction of catheters.

PRECAUTION: Use of heparin coated guidewires may require longer compression time at the insertion site. It has been reported that heparin induced thrombocytopenia, in some cases, has been associated with the use of heparin coated catheters. It has been reported that certain ion-selective blood analyzers may falsely report elevated serum electrolyte levels when samples are drawn through newly inserted henzalkonium-heparin coated catheters. Do not withdraw the guidewire through a metal cannula. Withdrawal may damage the guidewire or coating. If strong resistance is met during manipulation, discontinue the procedure and determine the cause for the resistance before proceeding. Avoid bending, kinking or modifying the shape of the wire.

NAMIC STOPCOCKS

INTENDED USE/INDICATIONS FOR USE: NAMIC Stopcocks are intended for use in hemodynamic monitoring procedures and for intra-arterial and intravenous administration of water-based solutions or radiographic contrast media.

WARNINGS: NAMIC Stopcocks are not recommended for use with lipids. Prolonged exposure to lipid solutions may result in stress cracking or leakage.

NAMIC ANGIOGRAPHIC CONTROL SYRINGE

INTENDED USE/INDICATIONS FOR USE: The NAMIC Angiographic Control Syringe is intended to be used for the intra-arterial or intravenous administration of radiographic contrast media.

WARNINGS: Do not store fluid in product. Inject immediately after filling. This syringe does not have a pressure gauge device. Therefore, it is not intended for balloon catheter inflation. Over inflation may result in the rupturing of the balloon.

NAMIC DEVICES
Manifolds, Adaptors, Torque Devices, Guidewires, Evacuation Sets, Pressure Monitoring Lines, Angiographic Kits, Fluid Delivery and Injection Sets

INTENDED USE/INDICATIONS FOR USE: These devices are intended to be used in fluid management and/or invasive pressure monitoring systems.

NAMIC PROTECTION STATION® PLUS, PROTECTION STATION PLUS WITH CONTRAST CONTROLLER™ CHECK VALVE SYSTEM

INTENDED USE/INDICATIONS FOR USE: The Protection Station Plus and Protection Station Plus with Contrast Controller Check Valve System are used for syringe flush, fluid administration and waste containment. In addition, the Protection Station Plus with Contrast Controller Check Valve System is also used to minimize contrast waste and to allow one container of contrast media to be used on more than one patient.

WARNINGS: Do not attempt to flush contrast media or air bubbles back through the Contrast Controller Check Valve System. The red handled four-way stopcock must be "off" to the Contrast Controller Check Valve system when flushing fluids into ANGIO-SAC® Collection Bag. Do not use Contrast Controller Spike Assembly on more than one container of contrast media. Do not use Protection Station Plus with Contrast Controller Check Valve System on more than one patient. Do not leave the Contrast Controller Spike Assembly intact in a container of contrast for longer than six (6) hours. Do not replace the Contrast Controller Tubing Assembly more than two (2) times. If there is any possibility that contamination may have occurred during set-up or use, disassemble and set up new sterile product.

PRECAUTIONS: Pressurized systems are intended for use with non-vented spikes. If using a vented spike in a pressurized system, close the vent flap. In non-pressurized fluid applications, verify that the roller clamp is completely open to allow for the proper flow of the fluid during syringe aspirations. To reduce the possibility of backcheck valve leakage, limit fluid bag height to 36 inches (91 cm) or less. Do not pressurize the system in excess of 300 mmHg (6 psi, 41 kPA).

NAMIC PROTECTION STATION

INTENDED USE/INDICATIONS FOR USE: The Protection Station is used for syringe flush, fluid administration and waste containment.

PRECAUTIONS: Pressurized systems are intended for use with non-vented spikes. If using a vented spike in a pressurized system, close the vent flap. In non-pressurized fluid applications, verify that the roller clamp is completely open to allow for the proper flow of the fluid during syringe aspirations. To reduce the possibility of backcheck valve leakage, limit fluid bag height to 36 inches (91 cm) or less. To prevent fluid loss with pressurized fluid applications, do not pressurize the system until the backcheck valve is connected to a stopcock, manifold or reflux valve. Do not pressurize the system in excess of 41 kPa (300 mmHg/6 psi).

NAMIC CONTRAST CONTROLLER SYSTEM

INTENDED USE/INDICATIONS FOR USE: The purpose of this system is to minimize contrast waste and allow one container of contrast media to be used on more than one patient.

WARNINGS: Do not attempt to flush contrast media or air bubbles back through the contrast delivery system. Do not use the spike assembly on more than one container of contrast media. Do not leave the spike assembly intact in a container of contrast for longer than six (6) hours. Do not use the tubing assembly on more than one patient. Do not replace the tubing assembly more than two (2) times.

If there is any possibility that contamination may have occurred during set-up or use, disassemble and set up new sterile product. Ensure that you are making secure connections when using this device to prevent the introduction of air into the system that could result in embolism and in rare instances death. All connections should be finger tightened. Over tightening can cause cracks and leaks to occur that could result in embolism and/or exposure to biohazards. Examine product carefully for entrapped air and fully debubble prior to injection to minimize the potential for embolism and in rare instances death.

NAMIC PERCEPTOR DT DISPOSABLE TRANSDUCER

INTENDED USE/INDICATIONS FOR USE: Physiological pressure transducers are utilized during invasive pressure monitoring, catheterization procedures and fluid delivery.

WARNINGS: Check for fluid leakage before and during the procedure. Leaks can result in the loss of sterility, fluid or blood loss, and/or air embolism. If a product leaks before or during use, retighten the leading connection or replace the product.

This product does not incorporate protection from accidental over pressurization. Over pressurizing may permanently impair the accuracy of the device.

PRECAUTIONS: The presence of air in the system may dampen the transmission of the patient's pressure to the transducer. Be sure to eliminate all air bubbles. Do not use transducer port as a main injection site for fluids.

NAMIC Y-ADAPTORS AND TRI-ADAPTORS

INTENDED USE/INDICATIONS FOR USE: NAMIC Y-Adaptors and Tri-Adaptors are recommended for supporting a fluid tight seal around percutaneous transluminal catheters and guidewires.

WARNINGS: Excessive aspiration rate through the angled side port may result in air bypass through the hemostatic valve.

PRECAUTIONS: Do not over tighten the Y-Adaptor hemostatic valve(s). This may cause the lumen of the catheter to collapse and/or impair free movement of the wire. Always be sure that the hemostatic valve(s) is/are completely closed during aspiration or injection. The user of this device should carefully consider the size of the device to be inserted through the Y-Tri-Adaptor when selecting the size of the Y-Tri-Adaptor to be used. Pressures greater than 200 psi (1379 kPa) may result in leakage or detachment of components.

THE GRIP™ TORQUE DEVICE

INTENDED USE/INDICATIONS FOR USE: The Grip Torque Device provides a convenient gripping surface for manipulating steerable guidewires and hypotube style fixed wire catheters used in coronary balloon dilatation. The Grip Torque Device may also be used as an adjustable stop to limit the advancement of the steerable guidewire within the dilatation catheter.

WARNINGS: The Grip Torque Device should be used only by physicians thoroughly trained in the technique of percutaneous transluminal coronary angioplasty. Do not use on the polymer portion of any catheter. Do not use if package is opened or damaged.

THE ESSENTIALS™ KIT

AVENUE® INSERTION TOOL

INTENDED USE/INDICATIONS FOR USE: The Avenue Insertion Tool is used to facilitate the introduction of a guidewire during general intravascular procedures.

GATEWAY™ PLUS Y-ADAPTOR

INTENDED USE/INDICATIONS FOR USE: The Gateway Plus Y-Adaptor is recommended for providing hemostasis around balloon dilatation catheters, guidewires, and other therapeutic devices during general intravascular procedures.

PRECAUTIONS: Prior to angioplasty, all equipment to be used for the procedure, including the dilatation catheter, should be carefully examined to verify proper function. This device should be used only by physicians thoroughly trained in angioplasty procedures. Before use of this device, administer appropriate anticoagulant. Do not over tighten the adjustable valve. Excessive tightening may inhibit the ability to manipulate the balloon dilatation catheter, guidewire or other therapeutic device and may also significantly increase dilatation catheter inflation/deflation times. Since therapeutic devices are fragile, exercise care during handling to reduce the possibility of accidental breakage. If resistance is felt during manipulation, discontinue further movement and determine the cause. Ensure that the balloon dilatation catheters are completely deflated before inserting or withdrawing the balloon through the Gateway Plus Adaptor.

TD2® TORQUE DEVICE

INTENDED USE/INDICATIONS FOR USE: The TD2 Torque Device is used for guidewire manipulation during general intravascular procedures.

WARNINGS: This device should be used only by physicians thoroughly trained in angioplasty procedures.

PRECAUTIONS: Do not over tighten the polymer cap. Excessive tightening may abrade the guidewire coating and make loosening difficult. Should the cap be accidentally removed from the TD2 Torque Device, the collett must be seated in the body before the cap can be put on again.

For ordering information or to learn more about the complete NAMIC® Fluid Management product line, visit

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Navilyst Medical, Inc.
26 Forest Street
Marlborough, MA 01752
www.navilystmedical.com

For more information, call
800.833.9973

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