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Cardiovascular  
Products





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# General Terms & Conditions

## Prices:

Subject to change without prior notice. All applicable taxes will be charged. Prices do not include shipping charges.

Freight is FOB shipping point. The minimum shipping quantity is one full carton of any single item.

## Bulk Non-Sterile:

Many of our products are available in bulk non-sterile packaging configurations. Contact customer service or your local sales rep for details and pricing.

## Payment:

Net 30 days or per contract.

## Freight:

All orders are shipped regular ground delivery, standard 5-7 business days, unless otherwise requested. Shipping is not included in the price of the product and is invoiced with shipment. If merchandise has been damaged in transit, please notify your shipper; then contact Customer Service [888.307.1144] for further instructions.

## Returned Goods Policy

1. Returns will be accepted up to 90 days from date of invoice. Products returned between 30 and 90 days will be charged a 25% re-stocking fee. Customer account will be credited accordingly. Returns will not be accepted after 90 days from date of invoice.
2. Surge Cardiovascular is committed to providing quality products and service. Therefore, we will accept for full credit the return of product that:
  - a) Is a result of an error by Surge Cardiovascular
  - b) Does not perform satisfactorily for the purposes and indications described in the labeling
3. Authorization is required for all returns and may be obtained through Customer Service. A Returned Goods Authorization (RGA) number will be issued and this number must be referenced on all returned packages. Freight on all returns must be prepaid by the customer except for returns listed in Section 2.
4. The following merchandise is not accepted for return:
  - a) Sterile items that are returned without the manufacturing seals intact
  - b) Special order products
  - c) Partial cartons or kits
  - d) Product within 13 months of expiration date
5. As part of an ongoing effort to improve the quality of our products, please return any defective product for evaluation. Credit or replacement will be issued by Surge Cardiovascular upon receipt of the defective product.
6. Call Surge Cardiovascular at 888.307.1144 for any other customer service or technical information questions.

## Surge Cardiovascular Products Overview

Surge Cardiovascular Products is an ISO 13485 medical device manufacturer that designs, develops, manufactures, and markets products for the global healthcare market. Surge Cardiovascular is dedicated to improving the quality of patient care by providing effective and affordable product solutions.

Since 2002, Surge Cardiovascular has provided custom assembly, packaging, and manufacturing for acute care hospitals and government facilities. We also serve as an original equipment manufacturer (OEM) for private label customers. Our best-in-class Quality Management System drives higher standards and engineering efficiencies, providing customers with higher quality products tailored to their unique needs.

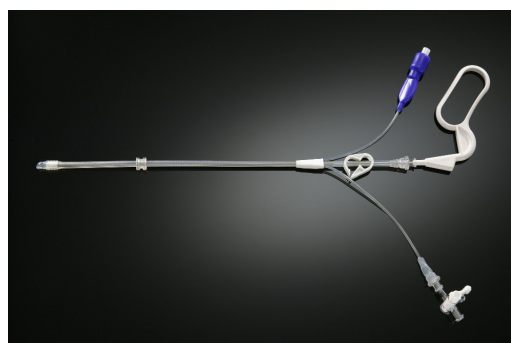
Surge Cardiovascular completed an acquisition in April 2010 to expand our product offering. These products include Antegrade and Retrograde Cardioplegia Cannulae, Perfusion Sets, and Vessel Cannulae.

At Surge, our mission is to be the most respected and successful provider of healthcare products and services in the eyes of our customers and our employees. Excellence, integrity, and respect for people are the cornerstones of the Surge Cardiovascular culture – and all are critical to our delivery of customer-focused change and innovation.



## Retrograde Cardioplegia Cannulae with Sure-Touch® Handle Manually Inflating

- Triple lumen cannula with a silicone cannula reinforced with wire wound axially along the length of a highly torqueable rigid body; manual inflation and deflation with supplied syringe
- Sure-Touch handle provides excellent cannula tip control and tactile response
- Available with either a smooth or textured 18mm medium balloon
- Offered with a rigid stylet or flexible guidewire to facilitate multiple transatrial placement techniques of the cannula into the coronary sinus



### Manually Inflating Sure-Touch® Handle Medium Balloon

Smooth balloon,  
rigid insertion stylet,  
15Fr

#### CATALOG NUMBER

RMH-0015S

#### QUANTITY PER BOX

5

Smooth balloon,  
stopcock in the pressure line,  
rigid insertion stylet,  
15Fr

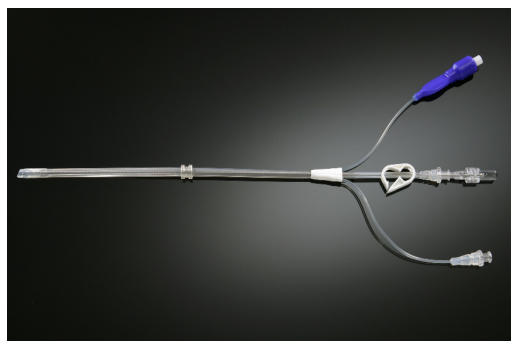
RMH-1015S

5

Textured balloon,  
stopcock in the pressure line,  
rigid insertion stylet,  
15Fr

RMH-T015S

5



### Manually Inflating Smooth Medium Balloon

Rigid insertion stylet,  
15Fr

#### CATALOG NUMBER

RMR-0015S

#### QUANTITY PER BOX

5

Guidewire insertion stylet,  
15Fr

RMG-0015S

5

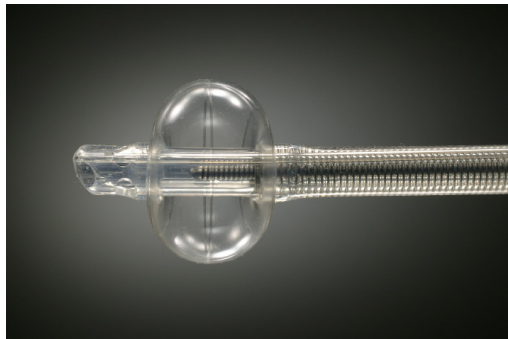
Without stylet,  
15Fr

RMN-0015S

5

## Retrograde Cardioplegia Cannulae

### Manually Inflating



Smooth Balloon

#### Manually Inflating, Smooth Medium Balloon

#### CATALOG NUMBER

#### QUANTITY PER BOX

Stopcock in the pressure line,  
rigid insertion stylet,  
15Fr

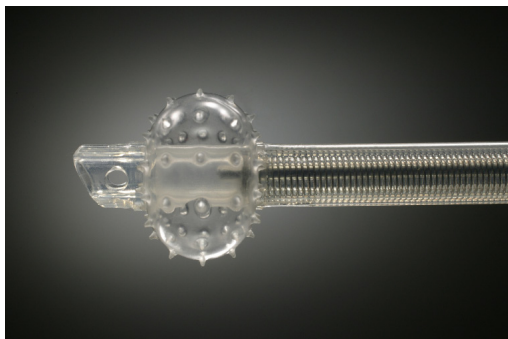
RMR-1015S

5

Stopcock in the pressure line,  
guidewire insertion stylet,  
15Fr

RMG-1015S

5



Textured Balloon

#### Manually Inflating, Textured Medium Balloon

#### CATALOG NUMBER

#### QUANTITY PER BOX

Stopcock in the pressure line,  
rigid insertion stylet,  
15Fr

RMR-T015S

5

Stopcock in the pressure line,  
guidewire insertion stylet,  
15Fr

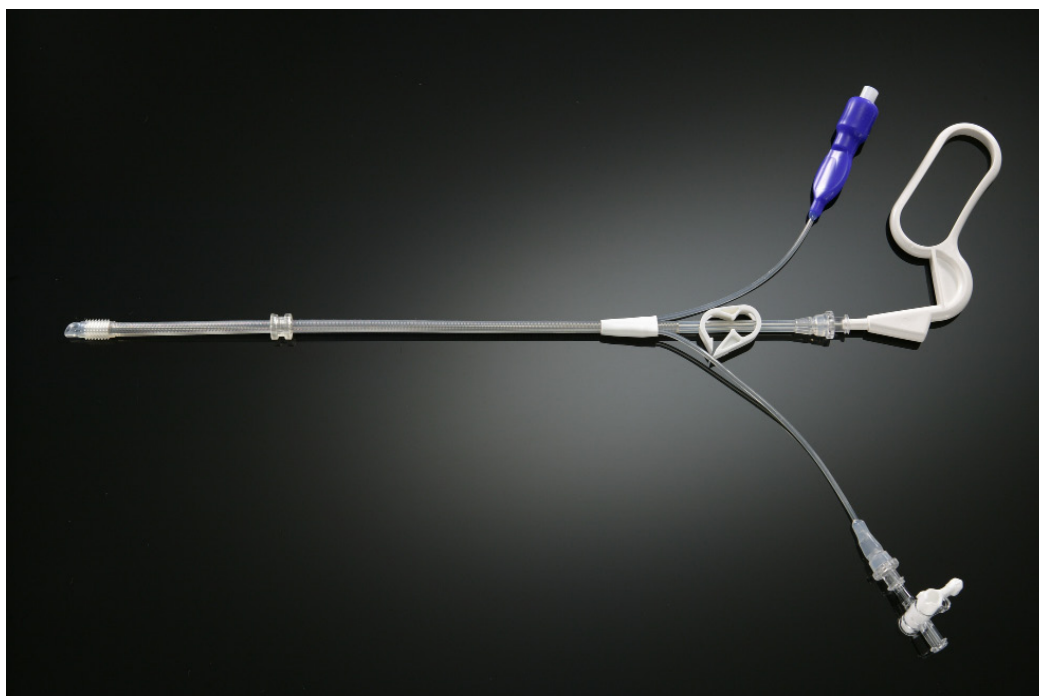
RMG-T015S

5

Stopcock in the pressure line,  
without stylet,  
15Fr

RMN-T015S

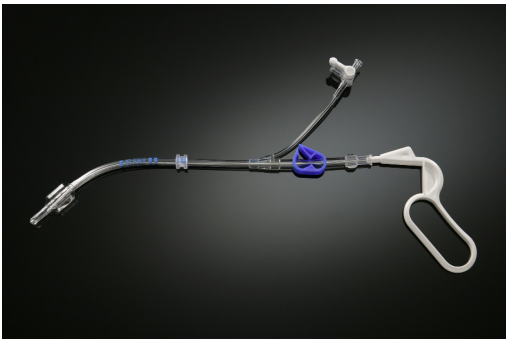
5





# Retrograde Cardioplegia Cannulae with Ultra Sof-Tip™ & Sure-Touch® Handle Self-Inflating

- Multi-lumen cannula with Ultra Sof-Tip and soft, low pressure balloon (smooth or textured) that automatically inflates from differential pressures occurring within the cannula during infusions
- Available with choice of 10.5 inch or 12.5 inch lengths
- Excellent tactile response with the Sure-Touch® or luer handle
- Rigid stylet or flexible guidewire options assist transatrial cannula placement within the coronary sinus

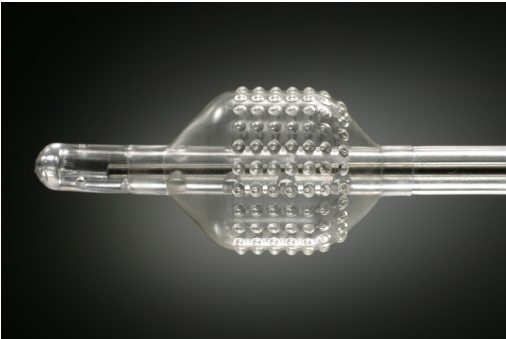


**Self-Inflating  
Sure-Touch® Handle  
Smooth Medium Balloon  
Ultra Sof-Tip™**

Rigid insertion stylet,  
10.5" length,  
15Fr

CATALOG NUMBER	QUANTITY PER BOX
RSH-M014S	5
RSH-M014S-L	5

Rigid insertion stylet,  
12.5" length,  
15Fr



**Self-Inflating  
Sure-Touch® Handle  
Textured Medium Balloon  
Ultra Sof-Tip™**

Rigid insertion stylet,  
10.5" length,  
15Fr

CATALOG NUMBER	QUANTITY PER BOX
RSH-T014S	5
RSH-T014S-L	5

Rigid insertion stylet,  
12.5" length,  
15Fr

**Textured Balloon**



## Retrograde Cardioplegia Cannulae with Ultra Sof-Tip™ Self-Inflating



### Self Inflating Smooth Medium Balloon Ultra Sof-Tip™

Rigid insertion stylet,  
10.5" length, 15Fr

#### CATALOG NUMBER

#### QUANTITY PER BOX

RSR-M014S

5

Rigid insertion stylet,  
12.5" length, 15Fr

RSR-M014S-L

5

Guidewire insertion stylet,  
10.5" length, 15Fr

RSG-M014S

5

Guidewire insertion stylet,  
12.5" length, 15Fr

RSG-M014S-L

5

### Self-Inflating Textured Medium Balloon Ultra Sof-Tip™

#### CATALOG NUMBER

#### QUANTITY PER BOX

Rigid insertion stylet,  
10.5" length, 15Fr

RSR-T014S

5

Rigid insertion stylet,  
12.5" length, 15Fr

RSR-T014S-L

5

Guidewire insertion stylet,  
10.5" length, 15Fr

RSG-T014S

5

Guidewire insertion stylet,  
12.5" length, 15Fr

RSG-T014S-L

5



Smooth Balloon

### Self-Inflating Without Stylet Ultra Sof-Tip™

#### CATALOG NUMBER

#### QUANTITY PER BOX

Smooth medium balloon,  
10.5" length, 15Fr

RSN-M014S

5

Smooth medium balloon,  
12.5" length, 15Fr

RSN-M014S-L

5

Textured medium balloon,  
10.5" length, 15Fr

RSN-T014S

5

Textured medium balloon,  
12.5" length, 15Fr

RSN-T014S-L

5

## Antegrade Cardioplegia Cannulae

- Delivers cardioplegia with choice of 12Ga or 14Ga sizing, available with and without vent line
- Vents cardioplegia away from the heart and may be used to aspirate air from the ascending aorta
- Easily connects to multiple styles of perfusion sets
- Vent line has a 0.25 inch slip connector



### Insertion Needle

### CATALOG NUMBER

### QUANTITY PER BOX

12Ga (9Fr),  
with Insertion Needle,  
14Ga

ANT-1012S

20

14Ga (7Fr),  
with Insertion Needle,  
16Ga

ANT-1014S

20



### Insertion Needle with Vent Line

### CATALOG NUMBER

### QUANTITY PER BOX

12Ga (9Fr), with Vent Line  
& Insertion Needle,  
14Ga

ANT-2012S

20

14Ga (7Fr), with Vent Line  
& Insertion Needle,  
16Ga

ANT-2014S

20

## Vessel Cannulae

- Full line of vessel cannulae for delivery of cardioplegia solution to the heart
- Available with one-way or free-flow valves, in both rigid (blunt or beveled) and soft tip styles
- Stainless steel IMA needle available with unique 1.5mm Guyton soft tip

	Vessel Cannulae	CATALOG NUMBER	QUANTITY PER BOX
	Perfusion cannula, one-way, 3mm blunt tip	PER-3001S	40
	Perfusion cannula, free-flow, 3mm blunt tip	PER-3003S	40
	Saphenous vein cannula, opaque, 3mm blunt tip	PER-3006S	40
	Vessel cannula, rigid, 3mm blunt tip	PER-3007S	40
	Vessel cannula, rigid, 3mm beveled tip	PER-3008S	40
	Internal Coronary Vessel Cannula, stainless steel, 1mm bulb tip	PER-3009S	20
	Vessel cannula, Guyton soft tip IMA needle, 1.5mm tip	PER-3015S	10
	Blunt tip, free-flow	213-0251	25
	Blunt tip, free-flow (twin pack)	213-0252	25
	Blunt tip with check valve	213-026	25
	Beveled tip with check valve	213-027	25
	Blunt tip, free-flow, with luer extension	213-028	25

# Cardiac Suckers

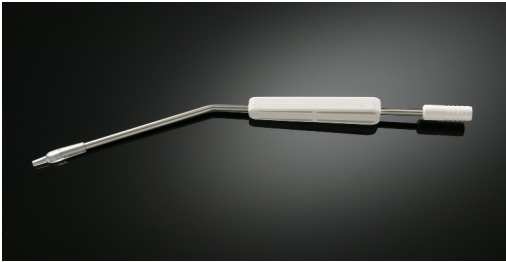
- Permits handheld removal of excess fluid from the surgical field with a flexible cardiac sucker or with rigid (standard and mini) suckers incorporating a stainless steel tube
- Low profile suction tube on flexible cardiac sucker equipped with 0.25 inch connector and fluted tip
- Rigid suckers available with rigid, fluted tip or soft tip with side ports



Intracardiac Suckers	CATALOG NUMBER	QUANTITY PER BOX
Flexible, fluted tip, 1/4" (6.4mm) connector; 14.5" (36.8cm) length	SUC-0840S	20



Rigid sucker, rigid, fluted tip, 1/4" (6.4mm) connector; 13" (33cm) length	SUC-4300S	20
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Rigid mini sucker; soft tip with side ports, 1/4" (6.4mm) connector; 9" (22.9cm) length	SUC-4991S	20
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## Perfusion Sets

- Used in conjunction with the Surge Antegrade Cardioplegia Cannulae and Vessel Cannulae to facilitate delivery of cardioplegia solution to the heart
- Configuration can consist of PVC tubing, tubing slip connectors (vented or non-vented), male luer, female luer, and color-coded clamps for flexible flow control



### Perfusion Sets

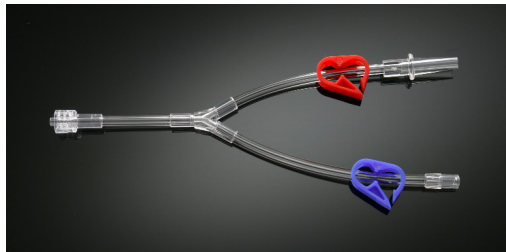
Coronary perfusion,  
Y-type,  
13.5" length (34.3cm)

### CATALOG NUMBER

PER-1004S

### QUANTITY PER BOX

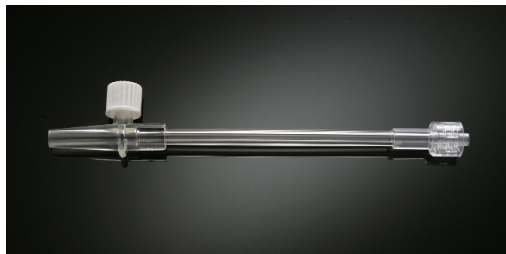
20



Venting,  
Y-type, 7.5" length (19cm)  
with color-coded clamps

PER-1005S

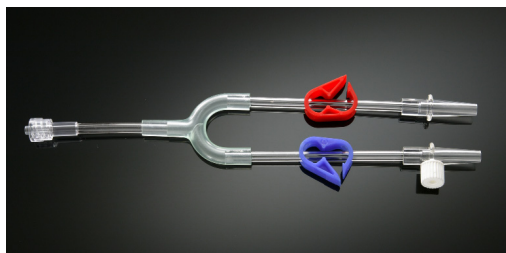
20



Straight with capped vent,  
5" length (12.7cm)

PER-1001S

20



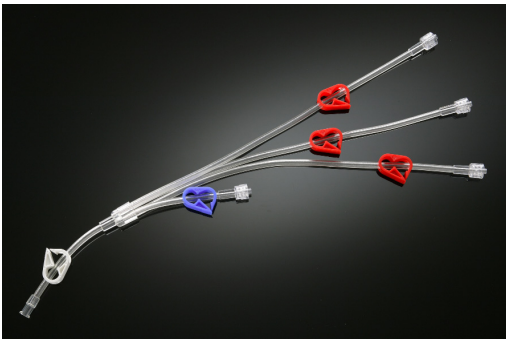
Re-circulation,  
Y-type with capped vent,  
8" length (20.3cm) with  
color-coded clamps

PER-1003S

20

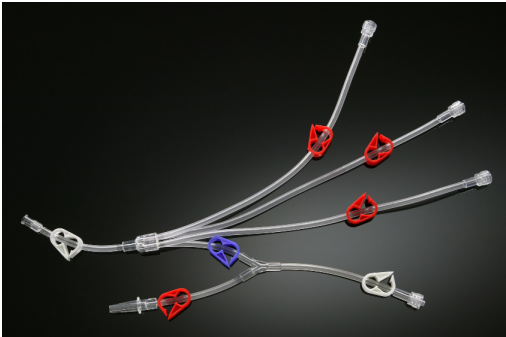
# Perfusion Sets

- Used during cardiopulmonary bypass to connect multiple coronary cannulae to a single infusion line
- Tubing configuration allows delivery of cardioplegia solution to an Antegrade Cardioplegia Cannula and three vein grafts
- Constructed of soft tubing, color-coded clamps provided for flexible flow control
- Antegrade/Retrograde Perfusion Set with color-coded tubing delivers cardioplegia solution through either Retrograde or Antegrade Cardioplegia Cannulae without changing cannulae connections; large stopcock base with self-adhesive easily adheres to surgical drape



**Multiple Perfusion Sets**  
 15" length (38.1cm);  
 one 3" arm (7.6cm),  
 three 10" arms (25.4cm);  
 color-coded clamps,  
 male luer locks,  
 female infusion connector

CATALOG NUMBER	QUANTITY PER BOX
PER-1400S	10



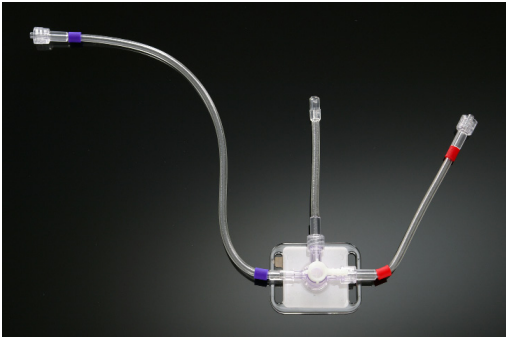
With vent line;  
 15" length (38.1cm);  
 color-coded clamps,  
 male luer locks,  
 female infusion connector

PER-1401S	10
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Multiple perfusion set  
 (PER-1400S) 15" length (38.1cm)  
 with three free-flow cannulae  
 (PER-3003S), male luer locks,  
 female infusion connector

PER-1407S	10
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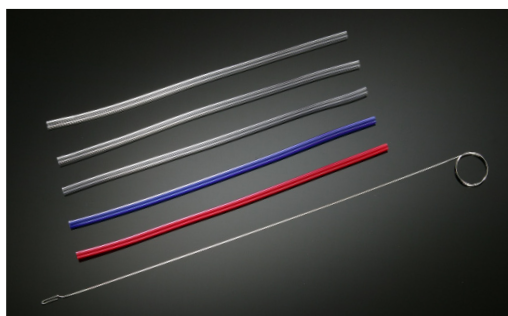
Antegrade/Retrograde  
 Perfusion Set with  
 self-adhesive high-flow  
 stopcock base

PER-1301S	10
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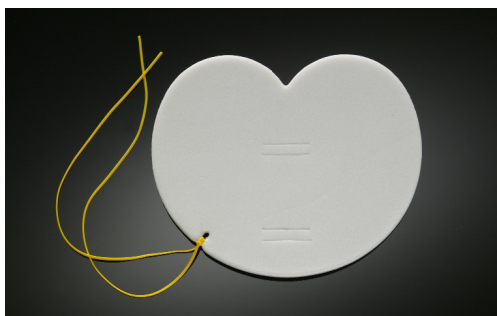
## Cardiovascular Surgery Accessories

- Secures cannulae during cardiopulmonary bypass surgery
- Comprised of stainless steel wire snare and color-coded tourniquet tubing
- Available in both pediatric and adult sizes



Tourniquets	CATALOG NUMBER	QUANTITY PER BOX
Pediatric tourniquet kit with snare; 1 red, 2 blue, 3 clear, 5.5" length (14cm)	TOU-7903S	40
Adult tourniquet kit with snare; 1 red, 1 blue, 7" length (18cm)	TOU-7904S	40
Vena caval tourniquet kit with snare; 3 clear, 7" length (18cm)	TOU-7905S	40
Complete adult tourniquet kit with snare; 1 red, 1 blue, 3 clear, 7" length (18cm)	TOU-7906S	40

- Designed to isolate the pericardial cavity from the ice/ice slush used to cool the myocardium
- Closed cell foam design with pull-out tabs for easy removal
- Available in adult and pediatric sizes and with perforated cannulae slots (PNP)



Cardiac Insulation Pads	CATALOG NUMBER	QUANTITY PER BOX
Adult cardiac insulation pad	ACIP	20
Pediatric cardiac insulation pad	PCIP	20
Phrenic nerve pad	PNP	20

- Consists of a single piece of stainless steel wire formed into a uniquely shaped spring
- Soft, polymer coating provides improved grip with surgical forceps or gloved hand



Coronary Artery Retraction Clips	CATALOG NUMBER	QUANTITY PER BOX
3mm	CAR-1613S	10
5mm	CAR-1615S	10



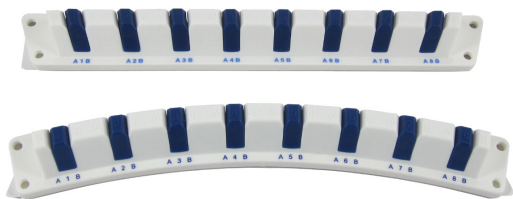
# Cardiovascular Surgery Accessories

- Helps prevent build-up of excess vacuum pressure or inadvertent retrograde flow when suctioning either from the heart or the surgical field



Suction Safety Device	CATALOG NUMBER	QUANTITY PER BOX
Suction safety device	SSD-100AS	20

- Quickly organizes and secures sutures during heart valve surgery
- 8 numbered A & B slots help prevent suture entanglement and reduce clutter
- EZ Peel adhesive backing removes easily even while gloved and quickly adheres to surgical drape
- 100% latex-free construction leaves zero latex residue on sutures



Suture Guides	CATALOG NUMBER	QUANTITY PER BOX
Straight edge, 1-pack	213-010	25
Straight edge, 3-pack	213-013	4
Curved suture guide, 1-pack	SUT-010	25
Curved suture guide, 3-pack	SUT-013	4
Curved suture guide, 4-pack	SUT-014	4

## Cardiovascular Surgery Accessories

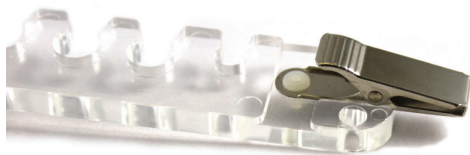
- Provides critical heart temperature monitoring during open-heart surgery
- Temperature accuracy of  $\pm 0.2^{\circ}\text{C}$  (at  $25^{\circ}\text{C}$ ) and a range of  $0^{\circ} - 70^{\circ}\text{C}$  (normal clinical range of  $10^{\circ} - 40^{\circ}\text{C}$ )
- YSI 400 series compatible with 0.25 inch diameter plug and 12 foot flexible wire



### Myocardial Temperature Probes

	CATALOG NUMBER	QUANTITY PER BOX
15mm	215-015	25
18mm	215-018	25
30mm	215-030	25
44mm	215-044	25

- Secures and organizes flexible tubing of various sizes in the sterile field
- Maintains neatness and helps eliminate tubing kinking and tangling, available with and without clips



### Tubing Organizers

	CATALOG NUMBER	QUANTITY PER BOX
8-hole	213-002	25
10-hole	213-003	25
8-hole w/ two swivel drape clips	213-004	25



## Temperature Sensing Foley Catheter Kits – Adult & Pediatric

- Provides highly accurate monitoring of patient temperature ( $\pm 0.1^{\circ}\text{C}$  at  $32^{\circ}\text{--}45^{\circ}\text{C}$ ) and simultaneous urethral catheterization
- 100% latex-free ComfortGlide design helps reduce pain and discomfort by minimizing balloon ridging and creasing
- Industry standard color-coded inflation valves for easy identification, YSI 400 series compatible
- Available in both adult and pediatric sizes
- Offered with pre-attached urinometer and urine collection bag for improved infection control



*Temperature Sensing Foleys available in a variety of insertion kit options, with and without pre-attached urinometers.*

5cc Balloon – Adult	CATALOG NUMBER	QUANTITY PER BOX
12Fr	210-0012	25
14Fr	210-0014	25
16Fr	210-0016	25
18Fr	210-0018	25
<b>3cc Balloon – Pediatric</b>		
8Fr	210-0008	25
10Fr	210-0010	25
<b>Adapter Cable (Reusable)</b>		
1/4" standard connector, 10 ft	210-510	1
HP® style connector, 10 ft	210-511	1

## Ordering Cardiovascular Products

To order, please contact our logistics partner and distributor, MED Alliance Solutions, LLC via one of the following methods:

**Call our Customer Service Representatives at:**

- 630.933.8661
- 8:30 a.m. – 5:00 p.m. Central Standard Time

**Fax:**

- 630.485.4223

**E-mail:**

- [orders@medalliancesolutions.com](mailto:orders@medalliancesolutions.com)

**Mail orders or confirmation documents to:**

- 3825 Commerce Drive, St. Charles, IL 60174

Orders for next day delivery must be received by 3:00 p.m. Central Standard Time

**Bulk Non-Sterile:**

Many of our products are available in bulk non-sterile packaging configurations. Contact customer service or your local sales rep for details and pricing.

### Limited Warranty and Disclaimer of Liability

Surge Cardiovascular's products ("Product") are manufactured under carefully controlled conditions and Surge Cardiovascular warrants the Product will perform in accordance with its labeling, and will be free from significant defects in material and workmanship under normal use for one year from the date of shipment.

Surge Cardiovascular's sole liability shall be limited to replacement of, or credit for, any Product returned to Surge Cardiovascular and which Surge Cardiovascular determines, in its sole discretion, to have been defective in either material or workmanship at the time of shipment. Surge Cardiovascular has no control over the conditions under which the Product is handled or used by third parties. THEREFORE, SURGE CARDIOVASCULAR DISCLAIMS ALL WARRANTIES, BOTH EXPRESS AND IMPLIED, WITH RESPECT TO THE PRODUCT, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SURGE CARDIOVASCULAR SHALL NOT BE LIABLE TO ANY PERSON OR ENTITY FOR ANY MEDICAL EXPENSES OR DAMAGES CAUSED BY ANY USE, DEFECT, FAILURE OR MALFUNCTION OF THE PRODUCT, WHETHER CLAIM FOR SUCH DAMAGES IS BASED UPON WARRANTY, CONTRACT, TORT OR OTHERWISE. NO PERSON HAS ANY AUTHORITY TO BIND SURGE CARDIOVASCULAR TO ANY REPRESENTATION OR WARRANTY WITH RESPECT TO THE PRODUCT.

The exclusions and limitations above are not intended to and should not be construed as intending to contravene mandatory provisions of applicable law. If any part of this Limited Warranty and Disclaimer of Liability is held unenforceable or in conflict with applicable law by a court of competent jurisdiction, the validity of the remaining portions shall be enforced as if this Limited Warranty and Disclaimer of Liability did not contain the part held invalid.



## Our Mission Statement

Through customer focused change and innovation we will be the most respected and successful provider of healthcare products and services as viewed by our customers and employees.

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269.629.5770 fax

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