ThruPort Systems Product Line

- EndoVent catheter
- ProPlege device
- Soft tissue retractor
- QuickDraw cannula
- IntraClude device
- EndoReturn cannula
IntraClude Intra-Aortic Occlusion Device

Model: ICF100

The IntraClude intra-aortic occlusion device is indicated for use in patients undergoing cardiopulmonary bypass. The IntraClude intra-aortic occlusion device occludes and vents the ascending aorta when the balloon is inflated. The device’s central lumen allows delivery of cardioplegia to arrest the heart. The pressure lumen allows monitoring of the aortic root pressure.

Description:

- 10.5 Fr (3.5mm), triple-lumen, 100 cm long catheter
- Designed to occlude the ascending aorta in order to partition the aortic root from arterial circulation
- Balloon expands to occlude a range of aorta sizes from 20 to 40 mm
- Designed to be used in the femoral approach with the Edwards EndoReturn (ER21B or ER23B) arterial cannula or the Edwards introducer sheath (IS19A)
- The shaft is provided with an extended strain relief designed to prevent kinking
EndoReturn Arterial Cannula and 19 Fr (6.3 mm) Arterial Cannula

Models:
IS19A (19 Fr Introducer sheath)  
ER21B (21 Fr EndoReturn arterial cannula)  
ER23B (23 Fr EndoReturn arterial cannula)  

The EndoReturn arterial cannula and 19 Fr (6.3 mm) arterial cannula are indicated for patients undergoing cardiopulmonary bypass. They are intended to deliver oxygenated blood for cardiopulmonary bypass during surgery. The EndoReturn arterial cannula with hemostasis valve also allows the hemostatic introduction and removal of vascular catheters such as the EndoClamp aortic catheter.

Description:
- Kits include a wire-reinforced cannula with hemostasis valve, an introducer and a guidewire  
- The cannulae have a wire-reinforced section to provide kink resistance and flexibility  
- Tapered tips to aid in insertion and advancement into the femoral artery  
- Hemostasis valve designed to allow passage of catheters, such as the EndoClamp aortic catheter  
- The introducers accept a .038 in. (0.97 mm) guidewire and are marked to simplify assembly and indicate alignment  
- A lubricious coating is applied to the surface of the cannula body, designed to ease insertion and retraction of catheters and introducers
ProPlege Peripheral Retrograde Cardioplegia Device

Model: PR9

The ProPlege device is indicated for occlusion of the coronary sinus, delivery of cardioplegia solution, and monitoring of coronary sinus pressure during cardiopulmonary bypass.

Description:

- 9 Fr (3.1 mm), 59 cm long, triple-lumen, articulating device
- Designed for occluding the coronary sinus for retrograde perfusion of the coronary circulation
- Balloon expands to occlude a range of coronary sinus diameters
- The large central lumen of the ProPlege device delivers cardioplegic solution to the coronary sinus
- The two remaining lumens serve as conduits for balloon inflation and coronary sinus pressure monitoring distal to the balloon
- The shaft features an articulation mechanism which changes the curvature of the distal end when the positioning dial is manipulated
- The ProPlege device is protected by a contamination guard and a distal connector allows for connection of the contamination guard to the introducer sheath
EndoVent Pulmonary Catheter Kit

Product code:
EV

The EndoVent pulmonary catheter is indicated for use in patients undergoing cardiopulmonary bypass. It is intended to remove blood from the pulmonary artery and assist in decompressing the heart.

**Description:**

- 8.3 Fr (2.8 mm), double lumen catheter intended to vent the pulmonary artery.
- Preshaped and flexible to facilitate percutaneous placement through the internal jugular vein or the subclavian vein.
- An integrated balloon designed to flow-direct the catheter into the pulmonary artery.
- The EndoVent pulmonary catheter is protected by a contamination guard which is compatible with the supplied introducer sheath.
Edwards QuickDraw Venous Cannula

Models:
QD22 (22 Fr QuickDraw cannula)
QD25 (25 Fr QuickDraw cannula)

Use of the QuickDraw venous cannula is indicated for patients undergoing cardiopulmonary bypass. The QuickDraw venous cannula serves to drain nonoxygenated blood from the venae cavae or right atrium during cardiopulmonary bypass.

Description:
- The Edwards QuickDraw venous cannula kit includes: a wirewound cannula; introducer(s); guidewire; connector hub; percutaneous insertion components
- The cannula and introducer(s) have tapered tips to aid in insertion and advancement into the femoral vein
- The cannula is marked at 5 cm intervals from the first marker band to indicate the depth of insertion
- The soft, clear tubing near the barbed end of the cannula allows visualization of air and blood and provides a non-reinforced clamp site
- The cannula connector is a 3/8 in. (9.5 mm) barbed connector
- The introducers accept a 0.038 in. (0.97 mm) guidewire for assistance in cannula insertion
- The connector hub secures and immobilizes the introducer within the cannula for easier, one-person insertion of the cannula/introducer assembly
- For percutaneous insertion, percutaneous insertion components are provided
Soft Tissue Retractor

Models:
TRS (Small)
TRM (Medium)
TRL (Large)

The ThruPort soft tissue retractor is used to allow visualization of intrathoracic structures and provide entry for the instruments into the thoracic cavity during specific cardiac surgical procedures. The ThruPort soft tissue retractor is designed to be inserted into an intercostal incision and retract tissue to form a port.

**Description:**
- Available in three sizes
- Fabric tabs designed to retract tissue from the incision
- Soft, polyester fabric conforms to intercostal incision
- Metallic ring compresses for insertion into thorax

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Ring diameter</th>
<th>Tab length</th>
<th>Tab width</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRS</td>
<td>Soft tissue retractor, small</td>
<td>2.2” (6.0 cm)</td>
<td>6.0” (15.2 cm)</td>
<td>1.5” (3.8 cm)</td>
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<tr>
<td>TRM</td>
<td>Soft tissue retractor, medium</td>
<td>3.0” (7.5 cm)</td>
<td>6.0” (15.2 cm)</td>
<td>2.0” (5.1 cm)</td>
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<tr>
<td>TRL</td>
<td>Soft tissue retractor, large</td>
<td>3.5” (9.0 cm)</td>
<td>6.0” (15.2 cm)</td>
<td>2.5” (6.4 cm)</td>
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</table>
OptiSite Arterial Cannula

Models:
OPTI16 (16 Fr)
OPTI18 (18 Fr)
OPTI20 (20 Fr)
OPTI22 (22 Fr)

The Edwards Lifesciences arterial perfusion cannulae are indicated for arterial perfusion in the extracorporeal circuit for < 6 hours. Cannulation site selection is left to the discretion of the surgeon and may include the femoral artery or the aortic arch.

Description:

- Smoothly rounded tips to facilitate atraumatic insertion
- The proximal ends of the cannulae are designed to accept 3/8” (9.5 mm) tubing
- Lock introducer is designed for use with 0.038” (0.96 mm) guidewires
- Removable vented luer cap designed to allow cannula venting when guidewire is not in use
Percutaneous Insertion Kit

Models:
PIKA (Arterial)
PIKV (Venous)

The Edwards Lifesciences percutaneous insertion kits contain components commonly used to perform a cutdown, Seldinger or other appropriate sterile technique.

**Description:**
- 5 ml syringe
- 8 Fr, 12 Fr and 16 Fr dilator
- 18 Ga. Introducer needle
- #11 Scalpel
- Guidewire
## ThruPort systems ordering information

<table>
<thead>
<tr>
<th>Model</th>
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</thead>
<tbody>
<tr>
<td>ICF100</td>
<td>IntraClude intra-aortic occlusion device</td>
</tr>
<tr>
<td>PR9</td>
<td>ProPlege peripheral retrograde cardioplegia device</td>
</tr>
<tr>
<td>EV</td>
<td>EndoVent pulmonary artery catheter</td>
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<tr>
<td>QD22</td>
<td>22 Fr QuickDraw venous cannula</td>
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<tr>
<td>QD25</td>
<td>25 Fr QuickDraw venous cannula</td>
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<tr>
<td>ER21B</td>
<td>21 Fr EndoReturn arterial cannula</td>
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<tr>
<td>ER23B</td>
<td>23 Fr EndoReturn arterial cannula</td>
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<tr>
<td>IS19A</td>
<td>19 Fr Introducer sheath</td>
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<tr>
<td>TRS</td>
<td>Soft tissue retractor, small</td>
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<tr>
<td>TRM</td>
<td>Soft tissue retractor, medium</td>
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<tr>
<td>TRL</td>
<td>Soft tissue retractor, large</td>
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<tr>
<td>KP1</td>
<td>Knot pusher</td>
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<tr>
<td>VPP</td>
<td>Valve placement pack</td>
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<tr>
<td>OPTI22</td>
<td>22 Fr OptiSite arterial cannula</td>
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<tr>
<td>PIKA</td>
<td>Percutaneous insertion kit, arterial</td>
</tr>
<tr>
<td>PIKV</td>
<td>Percutaneous insertion kit, venous</td>
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</tbody>
</table>

**CAUTION:** Federal (United States) law restricts this device to sale by or on the order of a physician. See instructions for use for full prescribing information, including indications, contraindications, warnings, precautions and adverse events.

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