MITROFLOW VALSALVA CONDUIT™

Features the only bovine pericardium aortic root surgery system
THE MITROFLOW VALSALVA CONDUIT REPLICATES THE NATIVE SINUS, NATURALLY
LIVANOVA’S INNOVATIVE MITROFLOW VALSALVA CONDUIT IS DESIGNED TO:

- Provide a reproducible and easy solution for better patients results.
- Take advantage of the Mitroflow proven hemodynamic and clinical results for better patients outcomes.
- Replicate the native sinus, reducing stress on the coronary anastomoses.
- Encourage natural formation of systolic vortex with sinus design.

NATURAL BLOOD FLOW
The Mitroflow Valsalva Conduit, which provides:

- A graft specially designed to be coupled directly in the operating room with the Mitroflow/Crown PRT valve, minimizing all the risks associated with the device manipulation during assembly and implantation, while avoiding increases in procedural time.
- A cuff to securely wrap around the Mitroflow/Crown PRT valve sewing ring, avoiding the insertion of delicate sutures for the conduit-valve assembly.
- Commissure orientation alignment guide lines, ensuring consistent positioning of the Mitroflow/Crown PRT valve within the conduit.
- Replicated sinus of Valsalva, reducing stress on the coronary anastomoses.
- A sealed graft with no pre-clotting requirements.
- A graft impregnated with minimally cross-linked gelatin for faster healing, encouraging a secure neo-intimal attachment with reduced inflammatory response.

The Mitroflow Valsalva Conduit should be immersed in sterile saline for no longer than 5 minutes prior to implantation to improve its handling qualities.

The Mitroflow®/Crown PRT™ Aortic Pericardial Heart Valve, which provides:

- Excellent valve hemodynamics2,3,4
- Proven durability5,6,7

Align the valve commissure posts with the orientation guides on the conduit cuff.
Insert the valve into the conduit.
After the two green retaining threads are cut, the unfolding ring slides off the graft and pulls the conduit cuff up over the valve.
Pull the suture with the blue knot until the conduit cuff folds down over the sewing ring of the valve, then tie and trim the suture.
In over 30 years of successful implants, the Mitroflow valve has consistently demonstrated excellent hemodynamic performance, ease of implant and proven durability. Thanks to its unique design, Mitroflow/Crown PRT offers surgeons the option, based on anatomy, of supra-annular or intra-annular valve placement with very small annuli.

**MITROFLOW/CROWN PRT® FEATURES:**

**Single pericardial sheet**
- Wide leaflet opening for improved hemodynamics
- Uniform mechanical behavior
- Optimized leaflet match
- Fatigue resistant
- Reduced risk of leaflet prolapse and dehiscence
- All valves are tested for functionality

**Cross-stitch Pattern**
- Cylindrical leaflet opening
- Evenly distributed stress on the commissures
- Forces at the valve post minimized during cardiac cycle

**Knit Polyester Fabric**
- Biocompatible
- Allows smooth contact between the pericardium and tissue
- No exposed knots
- Reduced microturbulence

**Soft Silicone Sewing Ring Insert**
- Facilitates suturing
- Reduces needle friction
- Conforms well to the annulus
- Tungsten impregnated for radiopacity

**Acetal Homopolymeric Stent**
- Creep resistant
- Couples maximum flow area with structural strength
- Reduced risk of valve regurgitation

* Crown PRT is an evolution of the Mitroflow DL valve. The two design changes are the addition of three visible markers on the sewing cuff and the addition of three radiographic markers on the sewing ring.
MITROFLOW VALSALVA CONDUIT*

TECHNICAL TIPS

- The conduit is always 5 mm larger than the valve graft. Example: 21 mm Mitroflow/Crown PRT valve fits a 26 mm Valsalva Conduit
- Use the standard Mitroflow/Crown PRT Valve Sizers
- Size the annulus before suture placement
- Compatible valve sizes with the Mitroflow Valsalva Conduit: 21 mm - 27 mm
- Always wet the graft before cauterizing
- Refer to the Instructions for Use provided with the Mitroflow Valsalva Conduit for detailed information, warnings, precautions and possible adverse effects.

MITROFLOW/CROWN PRT AND MITROFLOW VALSALVA CONDUIT ORDERING INFORMATION
(The Mitroflow/Crown PRT Aortic Valve and Mitroflow Valsalva Conduit are sold separately. Be sure to order both products.)

<table>
<thead>
<tr>
<th>Size Crown PRT Valve to Couple (mm)</th>
<th>Crown PRT Catalog Number</th>
<th>Size Mitroflow Valve to Couple (mm)</th>
<th>Mitroflow Catalog Number</th>
<th>Valsalva Conduit Catalog Number</th>
<th>Graft Inner Diameter (mm)</th>
<th>Graft Minimum Length (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>CNA21</td>
<td>21</td>
<td>DL21 or LX21</td>
<td>MVC026</td>
<td>26</td>
<td>100</td>
</tr>
<tr>
<td>23</td>
<td>CNA23</td>
<td>23</td>
<td>DL23 or LX23</td>
<td>MVC028</td>
<td>28</td>
<td>100</td>
</tr>
<tr>
<td>25</td>
<td>CNA25</td>
<td>25</td>
<td>DL25 or LX25</td>
<td>MVC030</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>27</td>
<td>CNA27</td>
<td>27</td>
<td>DL27 or LX27</td>
<td>MVC032</td>
<td>32</td>
<td>100</td>
</tr>
</tbody>
</table>

Accessories
- Mitroflow Valsalva Conduit Base* ICY1225

* Base must be cleaned and sterilized before each use.
References
