



Interventional Cardiology & Structural
Heart Therapies



STRUCTURAL HEART SOLUTIONS FAMILY

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Mermaid Medical Family of Structural Heart Solutions

At Mermaid Medical, our Cardiology solutions combine advanced technology with clinical insight to deliver minimally invasive solutions for structural heart therapies.

Our portfolio is designed to support cardiologists in treating complex cardiac anatomies – with precision, safety, and a focus on improving patient quality of life.

Through precision in every beat, we believe in innovative solutions that improves the rhythm of life.

We strive to advance heart care – **one beat at a time.**

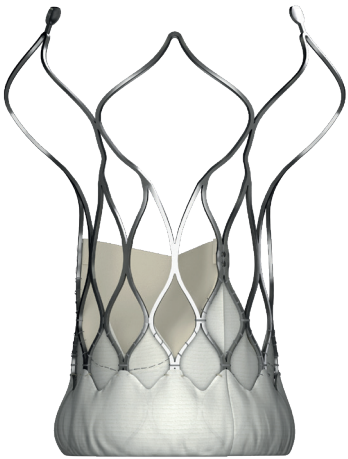


Mermaid Medical Group is a Nordic, privately owned company established in 2007 and headquartered in Copenhagen, Denmark. We develop, manufacture, and distribute medical devices to hospitals and end users across Europe, the U.S., and Asia. We primarily work within solutions to diseases in the vascular system as well as other devices used in interventional radiology. We strive to be the preferred partner for manufacturers as well as hospitals and healthcare professionals.



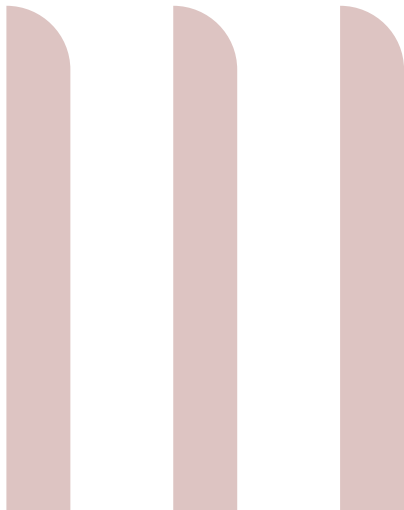
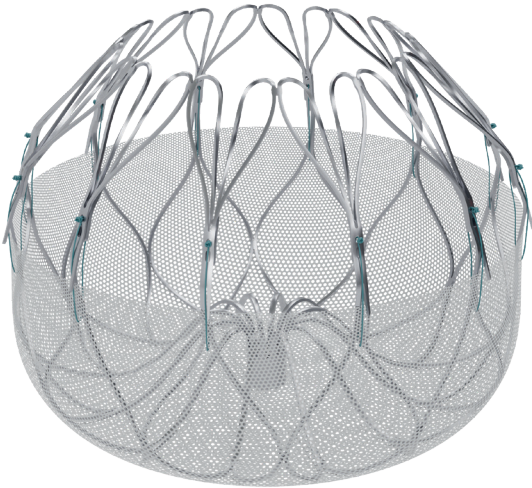
VitaFlow Liberty®

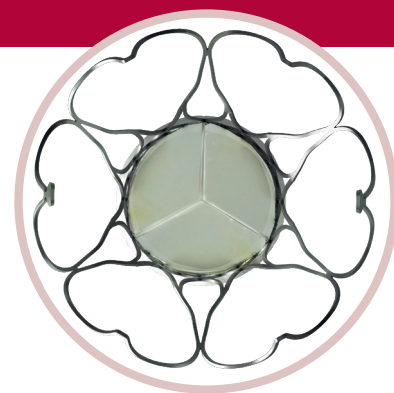
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VitaFlow Liberty® – Precision, Performance, and Safety in One Solution

VitaFlow Liberty® is a groundbreaking transcatheter aortic valve (TAVI) developed by MicroPort®, specifically designed to meet the needs of patients with severe aortic stenosis. With advanced technology and innovative design, the system offers a safe, effective, and gentle treatment – even for complex anatomical conditions.

As the world's first motorized delivery system, VitaFlow Liberty® ensures stable valve release, reduces the risk of valve displacement, and makes procedures more controllable. Its flexible catheter with 360° range of motion allows for easy navigation and precise positioning.

The valve is fully retrievable and repositionable when released up to 75%, offering up to three retrieval opportunities per procedure – enhancing safety and confidence during implantation.

Large Cells Design

- Reserved space for coronary intervention.

Supra-Annular Valve Design

- Larger effective orifice area (EOA).
- Improved hemodynamic results.

Double-Layer PET Skirt

- 11mm-12mm skirt edge, providing a larger effective landing zone.
- Reduce paravalvular leakage and regurgitation effectively.

Low Density Cells

- Excellent coaxial alignment during the release.
- Reduced risk of coronary artery occlusion.

Bovine Pericardial Leaflets

- Unique anti-calcification technology.

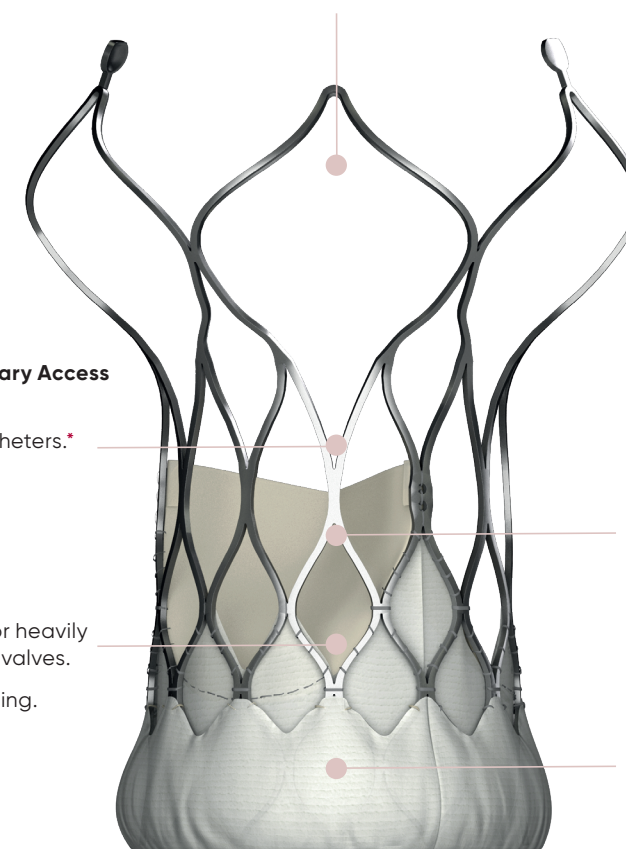
High Density Cells

- High radial support.
- Suited for severe calcified and/or bicuspid aortic valves.

Hybrid Cell Density Frame

Low Density Cells Provide an Easy-to-Bend Section

- Enhanced deliverability, suitable for aortic arches with acute angulation.
- Coaxial alignment during valve deployment.



Large Cells Preserve Coronary Access

- Able to simultaneously pass-through two 12F catheters.*
- 14F catheter can easily pass through.

High Density Cells

- High radial force suited for heavily calcified and/or bicuspid valves.
- Strengthens valve anchoring.

Tubular-Shaped Frame

- Minimizes downward pressure during deployment, improving deployment accuracy.
- Forms better sealing with native annulus.

Advanced Double-Layer PET Skirt

- Double-layer PET skirt, 11-12mm in height.
- Larger functional area for paravalvular leak prevention.



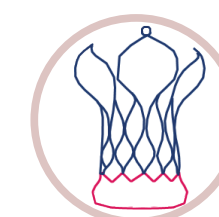
Electrically Enabled Delivery System

For control, stability, and accuracy.



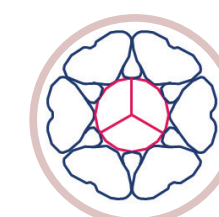
Hybrid Cell-Density Frame

Catered to varied clinical needs at different stages of implantation.



Advanced Double-Layer PET Skirt

Prevent paravalvular leaks.



VITAL-X™ Anti-Calcification Technology with Bovine Pericardial Leaflets
Extends valve durability.

*TAVI24 and above



World's First Motorized TAVI Delivery System

The VitaFlow Liberty® delivery system from MicroPort® is one of the most advanced and innovative systems in the field of transcatheter aortic valve implantation. Combining precision engineering with clinical flexibility to support safer and more effective procedures.

Integrated Sheath – Flexible Access With Maximum Control

- Innovative integrated sheath design.
- 16F/17F – equivalent integrated sheath.

Equal Response And Precision

- Electrically enabled motorized handle, designed to offer precise, responsive, and intuitive control during TAVI procedures.
- Smart Limit Switch with Visual and Audible Feedback. Provides real-time alerts during deployment, improving safety and operator confidence.
- 1:1 instant response, the system reacts immediately to operator input—critical for precise valve placement when timing and accuracy matter most.
- Simultaneous control of the handle and guidewire.

Flexibility for Coaxial Alignment

- 360-degree omni-directional flexibility.
- The world's first double reinforced spiral design.

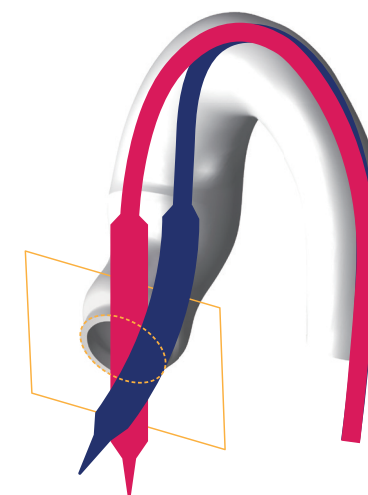
Multiple Retrievable Function

- Can recross the valve after retrieval.
- The valve is fully retrievable and repositionable when released up to 75%, offering up to three retrieval opportunities per procedure.

Electrically Enabled Delivery Device

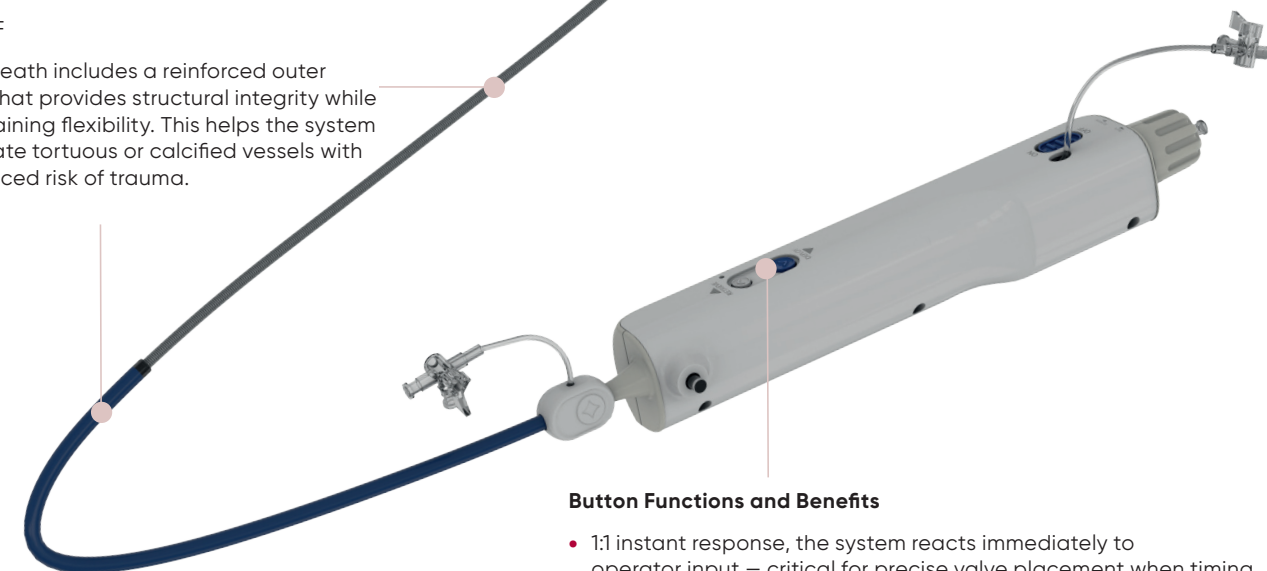
Capsule Design – Precision and Safety in Deployment

- Unique double-reinforced spiral capsule.
- 360° steerability allowing the catheter tip to bend in any direction.
- Smooth navigation through complex anatomies.
- The capsule's design contributes to coaxial alignment and stable deployment.



Reinforced Outer Shaft

- 16F/17F
- The sheath includes a reinforced outer layer that provides structural integrity while maintaining flexibility. This helps the system navigate tortuous or calcified vessels with a reduced risk of trauma.



Button Functions and Benefits

- 1:1 instant response, the system reacts immediately to operator input – critical for precise valve placement when timing and accuracy matter most.
- Guidewire control – Integrated into the motorized delivery system, this feature enables the operator to manage both the valve release and the guidewire at the same time.
- Visual and audible feedback.
- Stable, rapid, and precise valve release and retrieval.



AnchorMan™ Left Atrial Appendage Closure System

The AnchorMan™ Left Atrial Appendage Closure System is an innovative medical device designed to reduce the risk of stroke in patients with non-valvular atrial fibrillation (NVAF).

With its unique semi-closed design and flexible deployment options, AnchorMan™ provides physicians with enhanced control and safety during procedures.

Semi-Closed Structure

- The AnchorMan™ device features a semi-closed cage formed by twelve 3D folding units, this design merges the advantages of both open and closed occluders.
- The semi-closed design allows for secure placement without requiring deep sheath insertion into the LAA, which is a common challenge with plug-type devices.
- The semi-closed structure of the AnchorMan™ is a key innovation that sets it apart from traditional LAA closure devices.

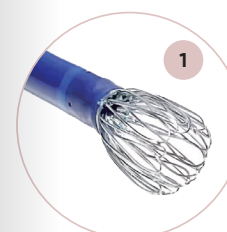
Rounded and Soft Distal End

- Reduced Tissue Damage: The rounded, soft distal end minimizes trauma to the delicate LAA tissue during deployment and retrieval.
- Lower Depth Requirements: Because of its cage-like structure, the device can be anchored effectively even in shallower LAA anatomies.

Deployment Flexibility

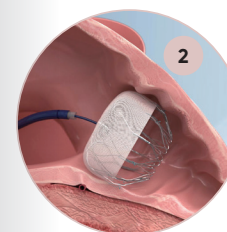
- The AnchorMan™ Left Atrial Appendage Closure System provides physicians with flexibility during implantation by offering two different deployment methods: advancement and unsheathing.

Adaptation to Anatomy for Effective Closure



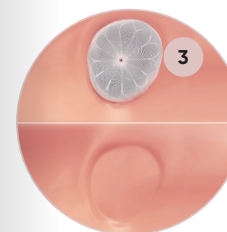
Round Distal End

- Unique "3D-folding" design.
- Confidence when advancing and releasing with ease.



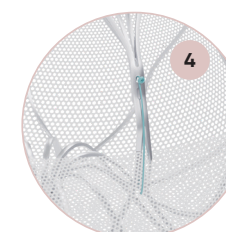
Semi-Closed Design

- Enhanced adaptation to native LAA anatomy.
- Better device stability.



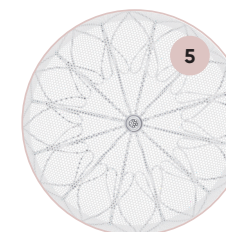
160-Micron PET Membrane

- 160-micron membrane.
- Accelerated endothelialization and occlusion.



Fixation Anchors

- Twelve fixation anchoring hooks with meticulous design on both length and angle.
- Stable fixation to prevent device migration.



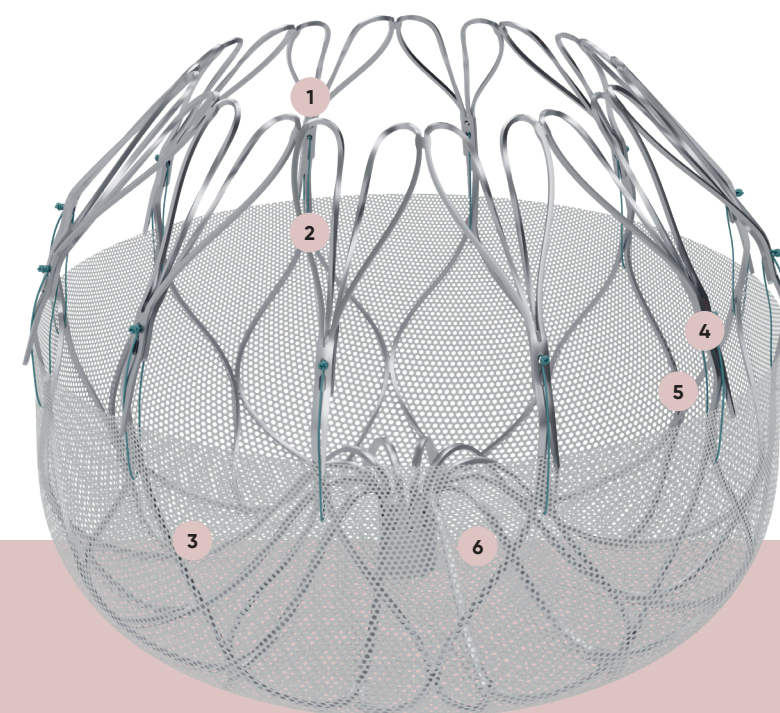
Dense Metal Frame

- With a tool of 12*2 sealing rods.
- More contact points for sealing.



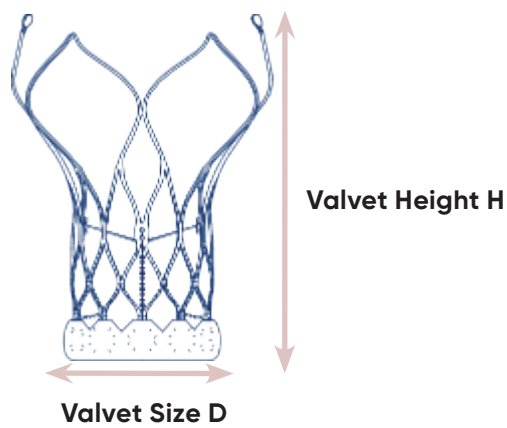
Inlaid Threaded Insert

- Reduced metal exposure, minimizing thrombosis.



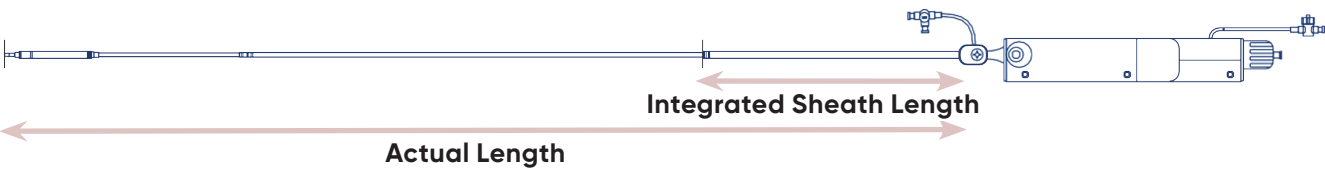
VitaFlow Liberty® Aortic Valve

| Ref. no. | Valve Size D (mm) | Aortic Annulus Diameter (mm) | Valvet Height H (mm) | Box |
|----------|-------------------|------------------------------|----------------------|-----|
| TAV21 | 21 | 17-20 | 50 | 1 |
| TAV24 | 24 | 20-23 | 50 | 1 |
| TAV27 | 27 | 23-26 | 53 | 1 |
| TAV30 | 30 | 26-29 | 53 | 1 |



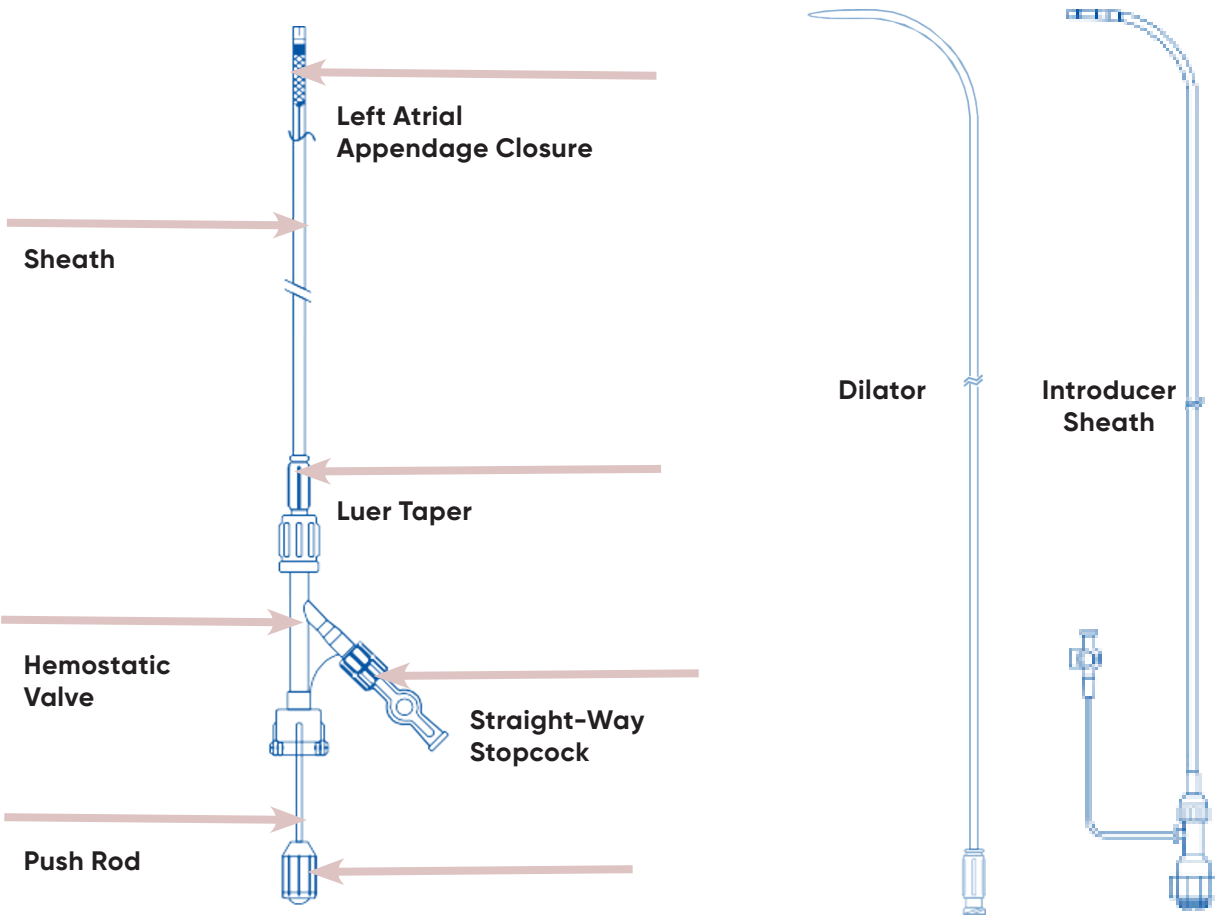
VitaFlow Liberty® Delivery System

| Ref. no. | Actual Length L1 (cm) | Integrated Sheath Length L2 (cm) | Box |
|----------|-----------------------|----------------------------------|-----|
| DSR21 | 112 | 30 | 1 |
| DSR24 | 112 | 30 | 1 |
| DSR27 | 112 | 30 | 1 |
| DSR30 | 112 | 30 | 1 |



AnchorMan™ Left Atrial Appendage Closure Device

| Ref. no. | Closure Device Size | Delivery System Effective Length | Delivery System Outside Diameter | Box |
|----------|---------------------|----------------------------------|----------------------------------|-----|
| FL35 | 35mm | 850mm | 12Fr | 1 |
| FL32 | 32mm | 850mm | 12Fr | 1 |
| FL29 | 29mm | 850mm | 12Fr | 1 |
| FL26 | 26mm | 850mm | 12Fr | 1 |
| FL23 | 23mm | 850mm | 12Fr | 1 |
| FL20 | 20mm | 850mm | 12Fr | 1 |





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