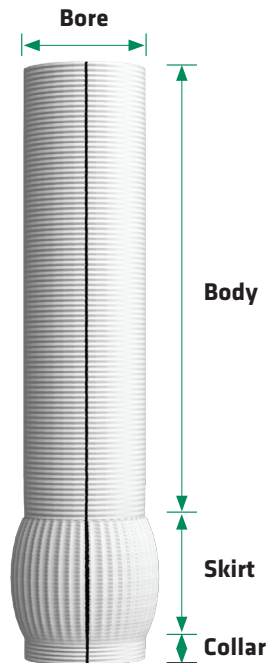


Gelweave™ Valsalva

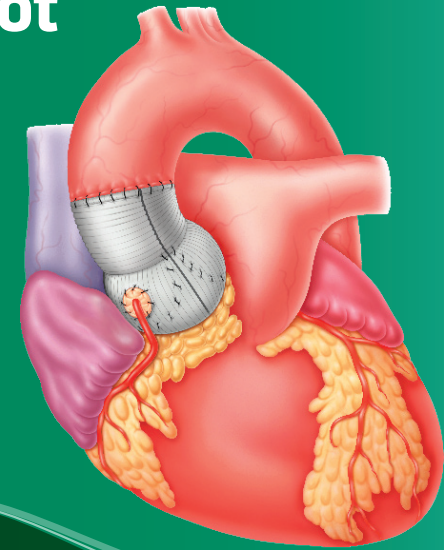
Bore Size mm	Max Skirt Diameter mm	Body Length cm	Skirt Length mm	Collar Length mm	Catalogue No.
16	21	15	16	10	730016ADP
18	24	15	18	10	730018ADP
20	26	15	20	10	730020ADP
22	28	15	22	10	730022ADP
24	32	15	24	10	730024ADP
26	34	15	26	10	730026ADP
28	36	15	28	10	730028ADP
30	38	15	30	10	730030ADP
32	42	15	32	10	730032ADP
34	44	15	34	10	730034ADP



*“The ability of the [Gelweave™] Valsalva graft to provide independent sinuses of normal shape and dimension makes the reimplantation procedure applicable to virtually every patient. This, in turn, will result in improved standardisation and greater reproducibility of the results.”<sup>6</sup>*



The world's first anatomically designed aortic root graft<sup>1</sup>



References:

1. De Paulis R, et al. A New Aortic Dacron Conduit for Surgical Treatment of Aortic Root Pathology. Ital Heart J, 2000, 7, 457-463.
2. Schoenhoff FS, et al. The Role of the Sinuses of Valsalva in Aortic Root Flow Dynamics and Aortic Root Surgery: Evaluation by Magnetic Resonance Imaging. J Heart Valve Dis, 2009, 18, 380-385.
3. De Paulis R et al. One-year Appraisal of a New Aortic Root Conduit with Sinuses of Valsalva. J Thorac Cardiovasc Surg. 2002 Jan;123(1):33-9.
4. Data on file at Vascutek Ltd.
5. De Paulis R et al. Long Term Results of the Valve Reimplantation Technique using a Graft with Sinuses. J Thorac Cardiovasc Surg. 2015. 1-8.
6. De Paulis R, et al. Use of the Valsalva Graft and Long-term Follow Up. J Thorac Cardiovasc Surg. 2010 Dec;140(65):23-29.
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10. Stewart AS, et al. Modified Bentall Operation with a Novel Biologic Valved Conduit. Ann Thorac Surg, 2010, 89, 938-942.



Mimics native sinuses of Valsalva<sup>2</sup>



Physiological valve motion<sup>3</sup> and flow pattern<sup>2</sup>



Gelweave™ technology with excellent handling<sup>4</sup>

Product availability subject to local regulatory approval.



Mimics native **sinuses of Valsalva**<sup>2</sup>



**Physiological valve motion**<sup>3</sup>  
and flow pattern<sup>2</sup>

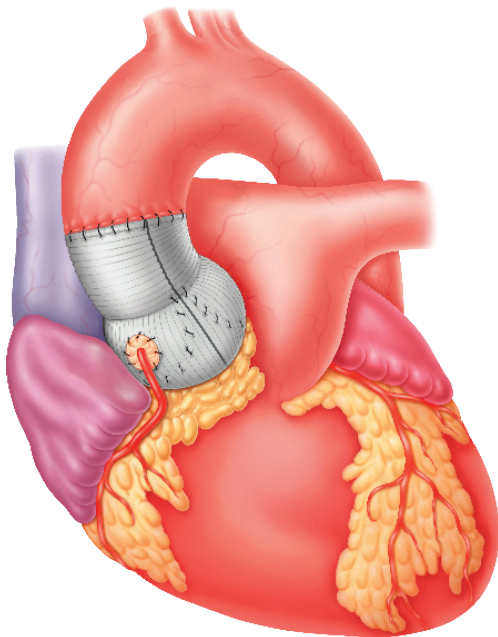


**Gelweave™** technology with  
excellent handling<sup>4</sup>

## Valve-Sparing Reimplantation

### The Gelweave™ Valsalva Sinus Design

- features a **15 year** clinical history<sup>5</sup>
- closely matches aortic root anatomy<sup>1</sup>
- effectively mimics<sup>2</sup> and generates the 3 independent sinuses of Valsalva<sup>6</sup>
- more physiologic valve motion<sup>3</sup>
- provides the potential to reduce tension on the coronary anastomoses<sup>3</sup>
- potential for increased valve longevity<sup>7</sup>



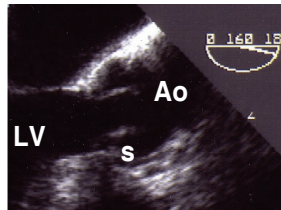
## Gelweave™ Valsalva



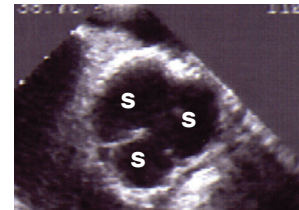
- Reimplantation with the Gelweave™ Valsalva graft maintains annular stability<sup>8</sup>
- The sinotubular junction and sinuses of Valsalva are crucial for the normal functioning of the valve<sup>1</sup>

## Valve-Sparing Reimplantation

### Postoperative Gelweave™ Valsalva graft sinus geometry



Long axis view of the aortic root during systole showing sinus geometry and space between the valve leaflets and graft wall.  
(LV = left ventricle, S = sinus, Ao = aorta)



Short axis view of the sinus region during diastole illustrating the presence of 3 discrete sinuses (S).

*Images courtesy of Professor Ruggero De Paulis,  
Dept of Cardiac Surgery, European Hospital, Rome, Italy*

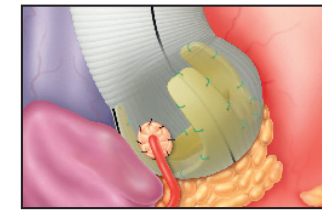
## Biological Bentall Procedures

The graft design enables stentless and stented biological valve conduits to be created<sup>9,10</sup> resulting in a more physiologic flow pattern.<sup>2</sup>

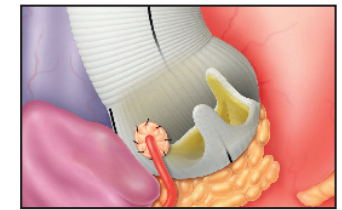
### The Gelweave™ Valsalva Sinus Design

- allows a space to be created between stented valve struts and the graft wall minimising the potential of coronary button complications<sup>9</sup>
- provides the potential to reduce tension on the coronary buttons<sup>9,10</sup>
- reduces the risk of leaflet contact with the graft wall during systole<sup>10</sup>
- potential for increased valve longevity<sup>10</sup>

### Implanted assembled biological valve conduits



Representative image of Gelweave™ Valsalva graft with stentless valve added *in situ*



Representative image of Gelweave™ Valsalva graft with stented valve added *in situ*