

# AQUAMANTYS™ MINIMALLY INVASIVE BIPOLAR SEALERS

Control epidural bleeding — safely, precisely, effectively.<sup>1</sup>

Aquamantys™ bipolar sealers harness a proprietary combination of radiofrequency energy and saline to provide hemostatic sealing of soft tissue in minimally invasive spine procedures. With limited thermal spread, Aquamantys™ bipolar sealers can be used to prevent and stop epidural bleeding near critical structures.<sup>1</sup>

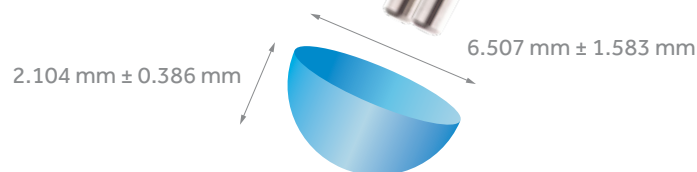
## TREATMENT AREA DEPTH OF EFFECT

Measurements for the Aquamantys™ SBS 5.0, EVS, and EVS Mini devices taken at 50W/3-second activation times.<sup>3</sup> Measurements for the Aquamantys™ MIS Flex/MIS Flex Mini device taken at 40W/3-second activation times.<sup>6</sup> Lateral spread is the distance from the edge of the device electrode to the edge of the treated tissue area. It indicates how close to a critical structure the Aquamantys™ bipolar sealer can be used.

### Aquamantys™ Sheathed Bipolar Sealer (SBS) 5.0 (sheath closed)

4.8 mm  
Max Electrode Width

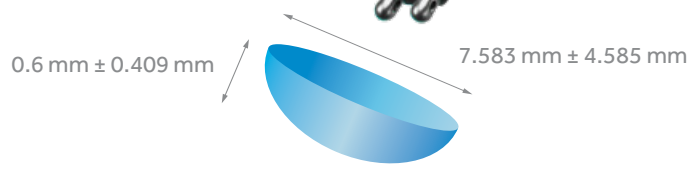
0.8 mm ± 0.792 mm  
Lateral spread from electrode



### Aquamantys™ MIS Flex/MIS Flex Mini Bipolar Sealer

4.7 mm  
Max Electrode Width

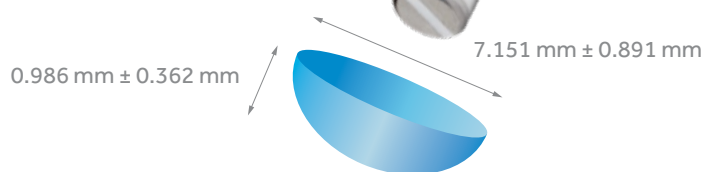
1.44 mm ± 0.792 mm  
Lateral spread from electrode



### Aquamantys™ Epidural Vein Sealer (EVS)

4.0 mm  
Max Electrode Width

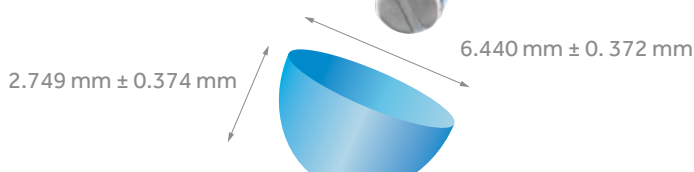
1.57 mm ± 0.445 mm  
Lateral spread from electrode



### Aquamantys™ Epidural Vein Sealer (EVS) Mini

3.4 mm  
Max Electrode Width

1.52 mm ± 0.186 mm  
Lateral spread from electrode



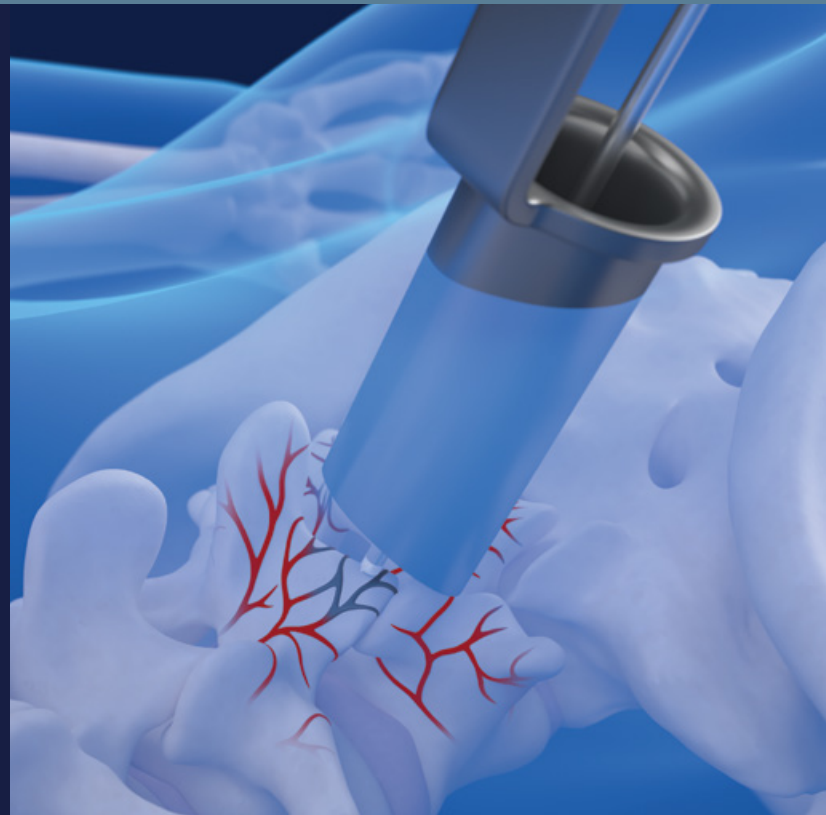
# Aquamantys™ Bipolar Sealers

## FEATURES AND BENEFITS

- Combination of saline and radiofrequency energy maintains tissue temperature at approximately 100° C, minimizing sticking and char<sup>4</sup>
- Enables prophylactic sealing of epidural veins to reduce overall blood loss<sup>1,3</sup>
- May improve visibility of the surgical field<sup>1,2</sup>
- Decreases surgical time<sup>2</sup>

## SURGICAL APPLICATIONS

- Decompression procedures (discectomy, laminectomy, and others)
- Procedures requiring access to the epidural space (PLIF, TLIF, PCF, and others)



## ORDERING INFORMATION

| Description   | Catalog Number |
|---|----------------|
| Aquamantys™ Epidural Vein Sealer (EVS) .....        | 23-121-1       |
| Aquamantys™ Epidural Vein Sealer (EVS) Mini .....   | 23-314-1       |
| Aquamantys™ MIS Flex.....                           | 23-321-1       |
| Aquamantys™ MIS Flex Mini.....                      | 23-322-1       |
| Aquamantys™ Sheathed Bipolar Sealer (SBS) 5.0 ..... | 23-312-1       |
| AEX™ Generator .....                                | 40-405-1       |

## References

1. Santiago P. Controlling epidural bleeding and improving visibility during spinal surgery with a novel bipolar sealing technology: a case report. Company funded, non-peer-reviewed Medtronic white paper, 2009.
2. Snyder BD, Hedequist D, Shannon E. Hemostatic efficacy of bipolar wound sealer as adjunct to wound management in children with neuromuscular scoliosis. Poster presentation at Pediatric Orthopaedic Society of North America Annual Meeting 2007; Hollywood, FL.
3. Mankin KP, Moore CA, Miller LE et al. Hemostasis with a bipolar sealer during surgical correction of adolescent idiopathic scoliosis. *J Spinal Disorders & Techniques*, October 2011; doi:10.1097/BSD.0b013e3182334ec5.
4. Geller DA, Tsung A, Maheshwari V, et al. Hepatic resection in 170 patients using saline-cooled radiofrequency coagulation. *HPB* 2005;7:208-213.
5. Data on file. Report 81-10-5552.
6. Data on file. Report 81-10-5771 Appendix B.

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Rx only. Refer to product instruction manual/package insert for instructions, warnings, precautions and contraindications.

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