

## Prism Surgical Spinal Fusion Implantable Devices

# MRI SAFETY INFORMATION

Non-clinical testing has been conducted for the Prism Surgical spinal fusion family of device systems as listed in this document.

**PLEASE NOTE:** Individual testing of each system or device has not been completed. A worst-case device/s was determined for testing purposes to validate the upper limit of safety in the MRI environment for the device/s listed in this document. Testing standards applied to the worst-case device/s are listed in this document.

The device/s listed in this document are MR conditional and can be scanned safely under the following conditions. Failure to follow these conditions may result in injury.

Static Magnetic Field Strength ( $B_0$ )	1.5 T and 3.0 T
Maximum Spatial Field Gradient	38.5 T/m (3,850 gauss/cm)
RF Excitation	Circularly Polarized (CP)
RF Transmit Coil Type	Integrated Whole Body Transmit Coil
RF Receive Coil Type	Any
Operating Mode	Normal Operating Mode



### RF Conditions for 1.5 T MR Scanner:

- Condition 1: Whole-body SAR  $\leq$  1.6 W/kg (30 min continuous scanning), or
- Condition 2: Whole-body SAR  $\leq$  2.0 W/kg for 15 min continuous scanning followed by 1 min cooling period (may be repeated up to three times in single imaging session), or
- Condition 3: Whole-body SAR  $\leq$  2.0 W/kg for 60 min continuous scanning if landmark limitations listed below are applied.

### RF Condition for 3.0 T MR Scanner:

- Condition 1: Whole-body SAR  $\leq$  1.3 W/kg (30 min continuous scanning), or
- Condition 2: Whole-body SAR  $\leq$  2.0 W/kg for 12 min continuous scanning followed by 3 min cooling period (may be repeated up to three times in single imaging session), or
- Condition 3: Whole-body SAR  $\leq$  2.0 W/kg for 60 min continuous scanning if landmark limitations listed below are applied.

### Scan Regions if RF Conditions 1 and 2 defined above are applied:

- Any landmark is acceptable.

### Scan Regions if RF Condition 3 defined above is applied:

- Patient landmark must assure the implanted device is at least 20 cm from isocentre for scanning at either 1.5 or 3.0 T.

### MR Image Artifact

The presence of this implant may produce an image artifact that extends approximately 37 mm from the device.

## Standards applied

ASTM Designation F2503-20: "Standard Practice for Marking Medical Devices and Other Items for Safety in the Magnetic Resonance Environment" (2020)

ASTM Designation F2182-19e2: "Standard Test Method for Measurement of Radio Frequency Induced Heating on or near Passive Implants During Magnetic Resonance Imaging" (2020)

ASTM Designation F2052-15: "Standard Test Method for Measurement of Magnetically Induced Displacement Force on Medical Devices in the Magnetic Resonance Environment" (2015)

ASTM Designation F2213-17: "Standard Test Method for Measurement of Magnetically Induced Torque on Medical Devices in the Magnetic Resonance Environment" (2017)

ASTM Designation F2119-07: "Standard Test Method for Evaluation of MR Image Artifacts from Passive Implants" (2007, Reapproved 2013)

## Prism Surgical Spinal Device System List

System name	System number	Limitations
Centaur Spinal System	131-08	Nil
Aquila Spinal System	131-16	Nil



Prism Surgical Pty Ltd  
15/43 Lang Parade MILTON QLD 4064  
Australia  
For more information phone: +61 7 3720 8882  
[www.prismsurgical.com.au](http://www.prismsurgical.com.au)