

Riata® ST Optim™

Position with the Best

Models 7020, 7021, 7022, 7030, 7031, 7070, 7071
Optim Insulation, Endocardial, Steroid-Eluting
Defibrillation Leads



SPECIFICATIONS

OPTIM™ LEAD INSULATION

Optim™ lead insulation is the first silicone-polyurethane co-polymer insulation designed specifically for cardiac lead use.

Innovative Material

Optim insulation is a chemical co-polymer that blends the best features of polyurethane and silicone. It is designed to provide the durability of polyurethane and the flexibility of silicone.

Improved Handling

Optim insulation with Fast-Pass® coating has been shown to be more lubricious than either silicone or polyurethane insulation. Benchmark testing has demonstrated that the flexibility of Optim insulation is comparable to silicone.*

Increased Durability

Optim insulation is more resistant to abrasion in lead-on-lead contact testing than silicone insulation. After two years of implantation, the material has shown biostability at least as good as polyurethane.*

RIATA® ST OPTIM™ LEAD

Thin Defibrillation Lead

The Riata® ST Optim™ defibrillation lead is one of the thinnest defibrillation leads. Its thin size provides ease of passage, facilitates small venous puncture, preserves venous space, and allows the lead to be inserted using a 7 F introducer.

Faster Implants with an Active Mapping Collar

Each Riata ST Optim lead's active mapping collar enables the physician to take threshold measurements prior to extending the helix, and is designed to save the time of extending and retracting the helix while searching for an acceptable location.

Easier Implants with Fast-Pass® Coating

The Riata ST Optim leads feature a lubricious coating (Fast-Pass®) on the outside of the lead, facilitating lead insertion through the introducer and veins. This coating helps to reduce lead body surface friction, allowing multiple leads to move easily against one another and reducing the chance of inadvertently moving one lead during the manipulation of another.

Designed to Prevent Tissue Ingrowth

The Riata ST Optim defibrillation lead combines two innovative designs intended to help prevent tissue ingrowth. The lead uses a flat outer wire, providing a low profile for its defibrillation coils. In addition, the lead is back-filled with silicone to completely fill the shock coil space.

Designed for Reliability with Redundant Conductors

Riata ST Optim defibrillation leads offer the safety of a built-in backup system by incorporating the use of redundant conductors in their design. While the delivery of a high-voltage shock or low-voltage pacing pulse only requires a single conductor, the Riata ST Optim lead offers additional conductors to serve as backup in the unlikely event of a conductor failure.

Increased Pacing Efficiency and Reduced Polarization with Titanium Nitride Fractal Coating

The tip and ring electrodes of the Riata ST Optim lead are coated with titanium nitride (TiN). TiN fractal coating is designed to provide precise sensing and improved contact with the myocardium, thereby reducing polarization and increasing pacing efficiency. Additionally, the TiN microporous coating creates a textured lead surface, designed to facilitate tissue ingrowth and foster better contact with the myocardium for more stable positioning.

Lower Thresholds with Steroid Elution

The Riata ST Optim defibrillation lead is a steroid-eluting lead that uses a monolithic controlled release device (MCRD) as a vehicle for steroid delivery. The dexamethasone sodium phosphate in a silicone matrix is designed to reduce inflammation at the lead/tissue interface, resulting in lower acute and chronic stimulation thresholds.

Shock-Coil Spacing Options to Fit Most Patients

The Riata ST Optim defibrillation leads are available in two different tip-to-proximal shock coil spacings. This spacing option helps to promote an effective shocking vector by allowing proper positioning of the proximal coil across a wide range of cardiac shapes and sizes.

Shock-Coil Configuration Options with Dual- or Single-Shock Coil Models

The Riata ST Optim defibrillation lead is available in both dual- and single-shock coil configurations, giving physicians the option to choose which configuration is best for each individual patient.

More Sensing Options with True or Integrated Bipolar Sensing

The Riata ST Optim lead provides physicians with the option of integrated or true bipolar sensing. The integrated bipolar sensing configurations may help to improve the consistency of R-wave amplitudes and the sensing of small R waves.

Multiple Lengths

The Riata ST Optim defibrillation lead is available in 60, 65, and 75 cm lengths (true bipolar models) affording physicians the flexibility to address the needs of patients with varying physical statures and vascular anatomies.

Active Fixation or Passive Fixation

Riata ST Optim leads are available in passive fixation, tined models or active fixation, extendable/retractable helix models designed to provide stable fixation and greater placement options.

* Jenney C, Tan J, Karicherla A, Burke J, Helland J. A New Insulation Material for Cardiac Leads with Potential for Improved Performance, HRS 2005, HeartRhythm, 2, S318-S319 (2005).

Riata® ST Optim™
True Bipolar, Silicone with Optim Insulation Overlay and Fast-Pass® Coating, Endocardial, Steroid-Eluting, Defibrillation Leads

LEAD MODEL NUMBER	7020	7021	7022	7070	7071
Fixation	Ext/Ret Helix	Ext/Ret Helix	Ext/Ret Helix	Tines	Tines
Shock Configuration	Dual-Coil	Dual-Coil	Single-Coil	Dual-Coil	Dual-Coil
Sensing Configuration	True Bipolar				
Min. Size Introducer	7 F				
Lengths	60, 65 and 75 cm				
Tip-to-Anode Spacing	11 mm				
Tip-to-Proximal Coil	17 cm	21 cm	N/A	17 cm	21 cm
Tip Electrode Area	8 mm ²	8 mm ²	8 mm ²	3.5 mm ²	3.5 mm ²
Steroid Plug	Yes				
Distal Shock Coil Area	367 mm ²				
Proximal Shock Coil Area	588 mm ²	588 mm ²	N/A	588 mm ²	588 mm ²

Riata® ST Optim™
Integrated Bipolar, Silicone with Optim Insulation Overlay and Fast-Pass® Coating, Steroid-Eluting, Defibrillation Leads

LEAD MODEL NUMBER	7030	7031
Fixation	Ext/Ret Helix	
Shock Configuration	Dual-Coil	
Sensing Configuration	Integrated Bipolar	
Min. Size Introducer	7 F	
Length(s)	60, 65 and 75 cm	
Tip-to-Distal Coil Spacing	11 mm	
Tip-to-Proximal Coil	17 cm	21 cm
Tip Electrode Area	8 mm ²	
Steroid Plug	Yes	
Distal Shock Coil Area	367 mm ²	
Proximal Shock Coil Area	588 mm ²	



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Consult the User's Manual for information on indications, contraindications, warnings and precautions.
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