

CARDIAC RHYTHM MANAGEMENT (CRM) LEAD TUBING



Optinova's Cardiac Rhythm Management (CRM) Lead Tubing can be made with ultra-thin walls and to meet demanding multi-lumen design. The product is made from medical implant grade TPU for patient safety and comfort.

We produce in class 8 cleanroom, compliant with ISO 13485 and ISO 9001 quality standards. Automated inspection is integral to quality control to ensure batch-to-batch consistency.

CRM Lead Tubing can be customized to meet specific customer requirements.

Our in-house polymer laboratory and extrusion facilities are equipped with FTIR, DSC and MFI. This allows us to conduct in-depth R&D activities to gain extensive knowledge about the properties and capabilities of raw materials and extruded products.

KEY ADVANTAGES

- Thin walls
- Abrasion resistant
- Excellent low-temperature flexibility
- Multi-level traceability
- Co-development with R&D support
- From prototyping to transfer to production

APPLICATIONS

Implantable lead extrusions for:

- Cardiac Rhythm Management
- Neurostimulation Applications

Contacts our sales offices or visit our website for more information about sample and specifications!

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MATERIAL PROPERTIES

TPU	Property	Specification	Unit	
General	Density			1.15 - 1.21
	Transparency			Good
	Sterialization compatibility			Eto, Peroxide
Electrical	Dielectric constant	D 150 at 10 ³ Hz		2.1
		D 150 at 10 ⁶ Hz		2.1
	Dielectric dissipation factor	D 150 at 10 ³ Hz		0.0001
		D 150 at 10 ⁶ Hz		0.0008
	Dielectric strength	D 149	Volt/mil	2 000
	Volume resistivity	D 257	Ohm • cm	> 10 ¹⁸
Environmental	Water absorption	D 570	%	< 1.4
	Weather resistance			Good
	Chemical resistance			Good
Mechanical	Tensile strength	D 1708, D 638	MPa	47.5
	Elongation	D 1708, D 638	%	390
	Flexural modulus	D 790 at 23°C	MPa	172
	Hardness	D 2240		D-55 D-75
Thermal	Service temperature	Maximum	°C	80
			°F	176
	Thermal conductivity	C-177	BTU/hr/ft ² /°F.in	0.32
	Vicat softening		°C	109
			°F	228

Note: This table is only meant to serve as a reference and the values are not necessarily typical for any specification. Users should evaluate the material to determine the suitability for their own particular application.

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