

# Polyimide (PI) Coated Wire

PI And High Lubricity PI Glide™ Coated Wire

## Overview-

Polyimide (PI) are a class of high performing polymers recognized for their outstanding mechanical, thermal, and chemical properties. Polyimides typically exhibit consistent properties through high and low temperatures and possess very good dielectric traits. These thermally stable polymers are biocompatible for use within the body and are sterilizable by several methods. Polyimides are also very resistant to abrasion and have very good wear characteristics.

Polyimide coated wire is integral for medical applications requiring fine-coated wire to have both excellent thermal stability and dielectric insulation properties. Polyimide wire is also biocompatible for applications such as ablation or electrophysiology. If additional lubricity is needed, PI Glide™, a PI/PTFE composite, can be an excellent choice for electrical designs and is also manufactured with ultra-thin coatings.



DIELECTRIC STRENGTH



CHEMICAL RESISTANCE



ABRASION RESISTANCE



*Coated wire options vary depending on coating properties, application requirements, sizing, and desired colors.*

## APPLICATIONS

- Signal wires for EP catheters
- Thermistor wires for ablation
- Thermistors for temperature measurement
- Sensor wires
- Electromagnetic coils

## CAPABILITIES AND SIZING

- Coatings as low as 0.0003" (0.0076 mm) thickness
- Can be applied to multiple wire types
  - Copper
  - Silver plated copper
  - Nitinol for space limitations
  - Stainless steel
- Cut lengths to 96" max (2438.4 mm)
- Natural amber or dark colors
- Multi-layer construction

## KEY PROPERTIES

- Class VI biocompatibility
- Temperature tolerance to 428 °F (220 °C)
- High tensile strength
- Thermal stability
- Good dielectric properties
- Low surface friction (PI Glide™)
- Sterilizable



# Polyimide (PI) Coated Wire

POLYIMIDE (PI) COATED WIRE	
Process	Coated Wire
Material	Polyimide, PI Glide™
Outside Diameter (OD)	0.0045" to 0.090" (0.1143 mm to 2.286 mm)
OD Tolerance ±	0.0002" to 0.001" (0.0051 mm to 0.025 mm)
Nominal Wall Thickness	0.0003" to 0.005" (0.0076 mm to 0.127 mm)
Wall Tolerance ±	± 25%
Cut Length	96" Max. (2438.4 mm) Spooled 1000 ft Min. (Spooled 304.8 m)
Surface Treatment	Tie Layer, Pebax®, Vestamid®
Wire Type	Copper, Silver Plated Copper, Stainless Steel, Nitinol
Colors	Natural Amber, Green, Red, Black
Sterilization Method	EtO Gamma*, e-beam*

\* Gamma and e-beam sterilization methods are not available with PI Glide™

