



Meeting tight tolerance requirements for invasive and implantable medical applications, Temp-Flex™ Medi-Spec™ Micro Extrusion Primary Wires deliver high reliability down to 52 AWG in a wide range of biocompatible conductor materials

Temp-Flex™ Medi-Spec™ Micro Extrusion Primary Wires enable customers to develop surgically implantable leads that can be densely packaged for a variety of medical applications. The wire insulation is applied by a precise extrusion process that results in superior dielectric integrity compared to other technologies.

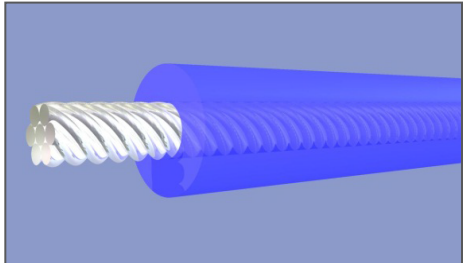
This process simultaneously encapsulates the wire, providing a consistent and uniform coating. In addition, the process provides a pin-hole-free insulation, resulting in limited risk of conductor exposure and provides a more reliable insulation versus dispersion or enamel coatings.

Features and Benefits

| | |
|---|---|
| Extrusion process used to apply insulation around the wire | Ensures accurate concentricity (uniform wall thickness around the wire) in implantable lead environments |
| Pin-hole-free wire without defect or holes | Offers superior reliability over similar products with emulsion and dispersion coatings which are susceptible to cracking |
| Wide selection of materials available: conductors (SPC, MP35N, precious metals, stainless steel); biocompatible insulation (FEP, PFA and ETFE); variety of wire gauges (36 to 52 AWG) | Supports a high degree of customization |
| Conductor wall thicknesses down to 0.0076mm | Meets tight tolerance requirements for invasive and implantable medical applications |
| Chemically inert insulation | Impervious and inert to surgical fluids. Ensures biocompatibility use in a human body |

**Temp-Flex™
MediSpec™ Micro
Extrusion Primary
Wires**

100060 Micro Extrusion
Primary Wires



MediSpec™ Micro Extrusion Primary Wire (stranded conductor with ETFE extruded coating)



MediSpec™ Micro Extrusion Primary Wire (PFA insulated, 36 AWG, 0.051mm wall thickness)

Specifications

Reference Information

Packaging:

DIN125 spool typical or as per customer request

UL File No.: E61522

Designed In: Inches

RoHS: Yes

Halogen Free: No

Construction

Conductor Material:

Silver-Plated Copper, Alloy (MP35N), Precious Metals, Stainless Steel

Conductor Size: 36 to 52 AWG

Insulation Materials: ETFE, PFA, FEP

Concentricity:

Dependent on combined conductor and insulation material selected, down to 0.0076mm wall thickness

Electrical

Dielectric Constant:

2.5 (ETFE) and 2.1 (PFA and FEP)

Dielectric Withstanding Voltage:

250V DC to 3000V DC depending on material and wall thickness

Mechanical

Bend (+/- 90°) Flex Life:

Dependent on specific part number

Rolling Flex Life:

Dependent on specific part number

Weight:

Dependent on specific part number

Physical

Fire Resistance: UL94 V-0

Operating Temperature:

ETFE: -55 to +150°C

FEP: -55 to +200°C

PFA: -55 to +260°C

Applications

Implantable Applications

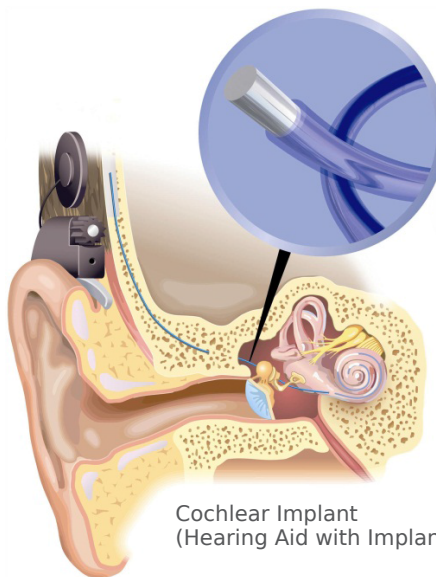
- Neurological Therapies
- Spinal Cord Stimulation
- Deep Brain Stimulation
- Pain Management
- Cochlear Implants

Cardiac Rhythm Management

- Pacemakers
- Defibrillators

Minimally Invasive Applications

- Catheters
- Invasive Probes
- Endoscopy



MediSpec™ Micro Extrusion Primary Wire for Implantable Lead Wire

Cochlear Implant (Hearing Aid with Implantable Components)

Ordering Information

| Series No. | URL |
|------------|--|
| 100060 | www.tempflex.com/products/micro-miniature-wire-cable/hook-up-wire |

www.molex.com/link/primarywires.html