



## Power Leads & Flexible Interconnects

For power distribution applications that require high temperature wire with maximum flexibility, New England Wire's general-purpose power leads and flexible interconnect wires can be manufactured using an extensive range of wire gauge sizes, strand constructions, conductor materials, wall thicknesses, shields and jackets.

We are a world leader in the manufacture of custom ultra-flexible interconnects offering conductor sizes from micro-miniature up to 500 MCM. Most commonly supplied in UL and CSA recognized PVC insulated constructions, our custom flexible interconnects combine ultra fine-wire stranding technology with thin wall extrusion to manufacture to your specific requirements: high or extremely low temperature, chemical resistance, voltage, low capacitance and, of course, flexibility.



### Custom Design Options

#### Conductors:

Due to its high conductivity, copper is the most commonly utilized conductor material, however, conductor material can vary based upon specific application requirements.

- |                      |                   |
|----------------------|-------------------|
| Oxygen Free Copper   | Aluminum          |
| Copper Alloy         | Copper Clad Steel |
| Copper Clad Aluminum | Resistance Wire   |
| Magnet Wire          |                   |

#### Plating

Our in-house drawing and plating capabilities ensure a variety of readily available conductor options to meet specific temperature, corrosion, termination and aesthetic requirements.

- |          |                            |
|----------|----------------------------|
| Tin      | Silver                     |
| Nickel   | Gold Plated Nickel Flashed |
| Platinum | Tinned Lead                |

#### Stranding

Flexible interconnects can be made from single end conductor strand sizes between 30 AWG - 52 AWG, with non-standard single end sizes available as required.

#### Size

Interconnects can be made to any equivalent gauge size or to match specific area (CMA, mm<sup>2</sup>) and can range from 44 AWG to 500 MCM conductors...specifically designed to match target insulation or conductor diameter or target resistance.

#### Insulation

Custom flexible interconnect insulations are typically chosen based upon application requirement. Materials offering superior flexibility are most commonly utilized, however, materials offering abrasion, chemical and temperature resistance are also available.

- |                 |               |
|-----------------|---------------|
| PVC             | Fluoropolymer |
| TPE             | FEP           |
| Polyurethane    | PFA           |
| Silicone Rubber | ETFE          |