

## Flexibility

Twice as flexible as competitive flat cables, making them ideal for linear motion and tight-space applications.



## Durability

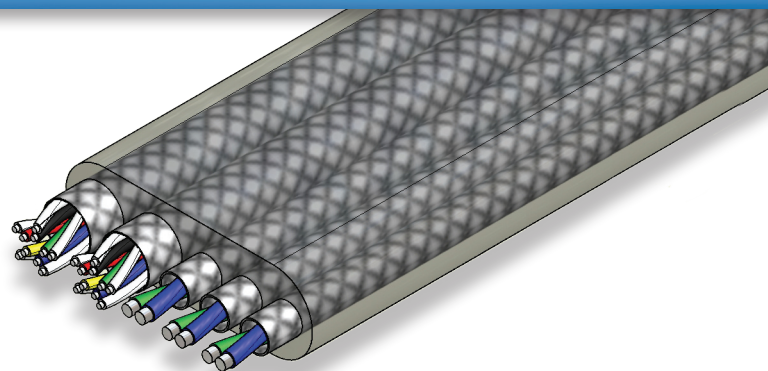
All wires are fully encapsulated in 'glass-clear' silicone, in a solid, one-piece construction, creating a highly durable cable package. The cable will not deform, break or wear for the lifetime of the product, even in high flex applications.

## Extreme Environments

Cicoil cables perform in temperatures from -65°C to 260°C, and during exposure to water, steam, and chemicals. They are also ideal for vacuum or clean room environments.

## Versatility

Single axis construction allows choice of installation. Use edge-to-edge for maximum flexibility, or stack for space conservation.



- For High Performance Motion Applications
- Power and Signal Wires in one Cable; for 1, 2 or 3 Servo Axes
- High-Flex, Shielded Wires
- More Compact than Original Motion Series Cables
- Packed with 20 Signal Wires & 6 Power Conductors

## Specifications

### Electrical

**Power Rating:** 2 KW, max. (intermittent duty)  
**Inductance:** .0118 µh/ft  
**Velocity of Propagation:** 69.5%  
**Conductor Resistance:** 3.6 Ω/1,000 ft.  
**Impedance:** 10.5 Ω  
**Capacitance:** 139.72 pF/Ft  
**Insulation Resistance:** 200 megΩ @ 500Vdc  
**Dielectric Strength:** 450 volts/mil (17.7KV/mm)  
**Dielectric Constant:** 2.8-3.0

### Environmental

**Temperature Rating:** -65°C to 260°C  
**Moisture Rating:** Submersible  
**Vacuum Rating:** 5 x 10<sup>-5</sup> torr<sup>①</sup>  
**Outgassing:** 0.24 %TML, 0.02 %CVMC<sup>②</sup>  
**Radiation:** 10<sup>7</sup> Roentgens (exposure)  
**Acid Resistance:** Good  
**Ozone Resistance:** Outstanding  
**Oil Resistance:** Good  
**Flame Resistance:** Good  
**Water/Steam Resistance:** Excellent (Including salt and DIW)  
**Alcohol Resistance:** Good  
**Toxins:** Halogen-free

### Mechanical

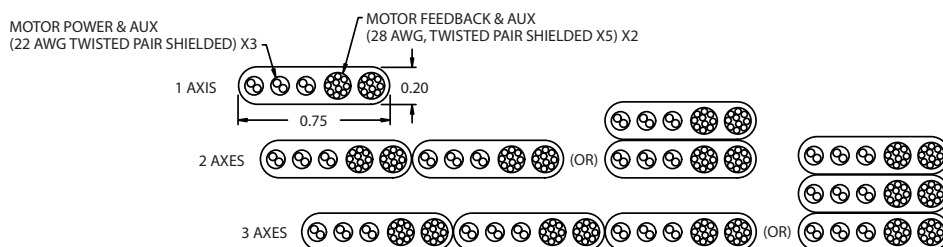
**Minimum Bend Radius:** 2" (flexing applications)  
**Life Expectancy:** 10,000,000 cycles, min.<sup>③</sup>

### Approvals

NASA 1124 (Outgassing for Spacecraft Materials)  
 UL Recognized—File #E324413, CE

### Notes

- Cicoil cable can exceed this rating when specified
- Cicoil outgassed cables are NASA rated for space applications (NASA Outgassing spec 1124)
- Continuous flexing applications



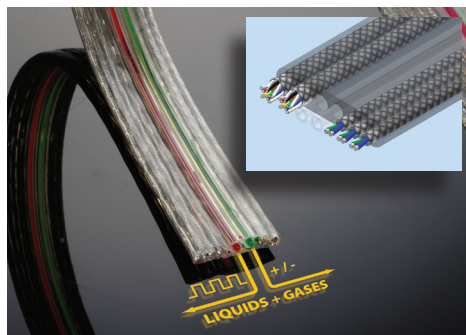
Motion Series II cable are maintained in stock for immediate delivery. Cables with options for higher power capability, assemblies with connectors, or options below, are produced to order with minimum lead times.

**Part Number:** MCP-2000-XXX

XXX = Length in Feet

### Options Available

**Integrated Tubing** – PTFE Hollow Tubing is integral to the cable, allowing for the transmission of liquids or gases through the cable.



**StripMount™** – A reinforced strip, integral to the cable, allows for quick and easy cable mounting, eliminating the need for bulky, expensive cable management systems. The patent-pending StripMount™ feature allows fasteners to be safely inserted through the cable for secure attachment to virtually any surface.



Specifications are nominal  
 Specifications and Pricing are subject to change