

Motion Series Cable

NEED CUSTOMS?
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- Ideal for Hi-Flex Motion Applications
- Designed for 1KW, 2KW and 3KW Servo Motors
- Shielded Power and Signal Wires for 1, 2 or 3 Servo Axes

Cicoil's Motion Series cable is available in three designs for 1, 2 or 3 axes of servo motion with multiple power ratings. Each Motion Series cable incorporates four shielded power cables and eight signal cables for each axis of motion. The Flex-Sil™ encapsulation provides a solid, one-piece construction that creates a highly durable, flexible flat cable package.



UL MEETS 94V-0, RoHS COMPLIANT, REACH COMPLIANT, FAA FLAME TESTED

Applications
Linear Motors, Servo and Stepper Motors

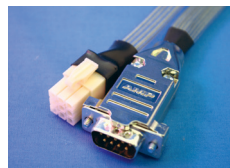
Cable

| Power Rating | Amp Rating ¹ | No. of Axes | Conductor Gauge | | Dimensions [inches] | | Part Number |
|--------------|-------------------------|-------------|-----------------|------------|---------------------|--------|-------------|
| | | | Power | Signal | Width | Height | |
| 1KW | 8 | 1 | 22 AWG/4c | 28 AWG/8c | 0.85 | 0.10 | MC-1000-1 |
| | | 2 | 22 AWG/8c | 28 AWG/16c | 1.68 | 0.10 | MC-1000-2 |
| | | 3 | 22 AWG/12c | 28 AWG/24c | 2.52 | 0.10 | MC-1000-3 |
| 2KW | 15 | 1 | 18 AWG/4c | 28 AWG/8c | 0.95 | 0.14 | MC-2000-1 |
| | | 2 | 18 AWG/8c | 28 AWG/16c | 1.89 | 0.14 | MC-2000-2 |
| | | 3 | 18 AWG/12c | 28 AWG/24c | 2.83 | 0.14 | MC-2000-3 |
| 3KW | 27 | 1 | 14 AWG/4c | 28 AWG/8c | 1.10 | 0.20 | MC-3000-1 |
| | | 2 | 14 AWG/8c | 28 AWG/16c | 2.19 | 0.20 | MC-3000-2 |
| | | 3 | 14 AWG/12c | 28 AWG/24c | 3.27 | 0.20 | MC-3000-3 |

Notes

1. Amp rating is the maximum value for each conductor at room temperature of 70°F (21°C). Amp rating decreases as temperature increases.

Cable Assemblies



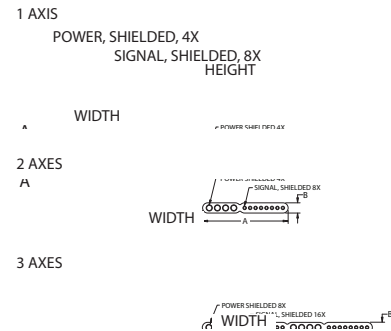
Please contact Cicoil for other connectors and length options.

| Cable Length (feet) | Part Number Addition |
|---------------------|----------------------|
| 3 | -CA003 |
| 6 | -CA006 |
| 12 | -CA012 |

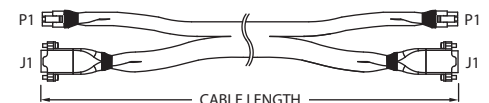
Notes

1. Append onto base cable Part Number for complete assembly. Example: MC-1000-1-CA003
2. Connector ratings may differ from cable ratings; refer to manufacturer specifications.

Dimensions



Assembly Dimensions



Connectors

- Signal (J1): D-Sub 9-Pin, P/N L717-DB25P Shell P/N 5748677-3

| Wire Gauge | Power (P1) |
|------------|---|
| 18-22 | Tin Contacts - TE, P/N 770904-1 9-Pos Housing - TE, P/N 172169-1 |
| 14 | Gold Contacts - MOLEX, P/N 02-09-6110 15-Pos Housing - MOLEX, P/N 19-09-2159 |

Cable Specifications

All engineering values are nominal and subject to change.

| Mechanical | Environmental |
|--|--|
| Conductors: Ultra flexible, finely stranded, tinned copper | Temperature Rating: -65°C to +165°C |
| Shielding: Ultra flexible, braided shields, with 90% nominal coverage | Moisture Rating: Submersible, Salt Water Resistant |
| Minimum Bend Radius: - 6x cable height for intermediate flex - 10x cable height for continuous flex | Clean Room Rating: Class 1, Zero Particulates |
| Flex Life: 10,000,000 cycles nominal | Extreme Environments: Sunlight, UV Light, Alcohol, Chemical and Oil Resistant |
| Outer Jacket Durometer Rating: 65 (Shore A) | Electrical |
| | Outer Jacket Dielectric Strength: 450 volts/mil (17.7 kv/mm) |
| | See Electrical Rating Chart on Page 47 |

Options

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