

Motion Series Cable /

- 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 Flexx-Sil™ encapsulation provides a solid, one-piece construction that creates a highly durable, flexible flat cable package.



Cable

Power	Amp Rating¹	No. of Axes	Conductor Gauge		Dimensions [inches]		Part
Rating			Power	Signal	Width	Height	Number
	8	1	22 AWG/4c	28 AWG/8c	0.85	0.10	MC-1000-1
1KW		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
	15	1	18 AWG/4c	28 AWG/8c	0.95	0.14	MC-2000-1
2KW		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
	27	1	14 AWG/4c	28 AWG/8c	1.10	0.20	MC-3000-1
3KW		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



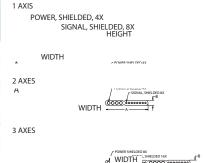
Please contact Cicoil for other connectors and length options.

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

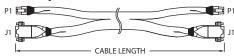
Notes

- Append onto base cable Part Number for complete assembly.
 Example: MC-1000-1-CA003
- 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

Conductors: Ultra flexible, finely stranded, tinned copper

Shielding: Ultra flexible, braided shields, with 90% nominal coverage

Minimum Bend Radius:

- 6x cable height for intermediate flex
- 10x cable height for continuous flex Flex Life: 10,000,000 cycles nominal

Outer Jacket Durometer Rating: 65 (Shore A)

Environmental

Temperature Rating: -65°C to +165°C

Moisture Rating: Submersible, Salt Water Resistant

Clean Room Rating: Class 1, Zero Particulates

Extreme Environments: Sunlight, UV Light, Alcohol, Chemical and Oil Resistant

Electrical

Outer Jacket Dielectric Strength: 450 volts/mil (17.7 kv/mm)

See Electrical Rating Chart on Page 47

Options	Pag		
Additional Conductors	2		
Low Friction Options	2		
StripMount™ Integrated Mounting Strip	2		
Integrated Tubing	2		
SuperTuff™ Jacket	2		
Colored Jacketing	2		
Strip and Tin Cable Ends	2		
FlexRail™ Self-Supporting Cable	3		
Complete Assembly	3		