

Motion Series Plus Cable

- Ideal for Hi-Flex Motion Applications
- Shielded Power and Signal Wires in a Compact Flat Cable
- For 1, 2 or 3 Servo Axes

Cicoil's Motion Series Plus cable is available in a single axis design that may be ganged for 1, 2 or 3 axes servo motion. Each Motion Series Plus cable integrates 6 power conductors and 20 signal wires in a compact flat cable measuring just 0.75″ wide by 0.2″ thick. The Flexx-Sil™ encapsulation provides a solid, one-piece construction that creates a highly durable, flexible flat cable package.



Cable

Amp	No. of Axes	Conductor Gauge		Dimensions [inches]		Part
Rating ¹		Power	Signal	Width	Height	Number
8	1	22 AWG/3 pr	28 AWG/10 pr	0.75	0.20	MCP-2000-1
	2	22 AWG/6 pr	28 AWG/20 pr	1.50	0.20	MCP-2000-2
	3	22 AWG/9 pr	28 AWG/30 pr	2.25	0.20	MCP-2000-3

Notes

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

Cable Assemblies



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

Notes

- Append onto base cable Part Number for complete assembly. Example: MCP-2000-1-CA003
- 2. Connector ratings may differ from cable ratings; refer to manufacturer specifications.

Dimensions

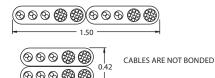
1 AXIS

MOTOR POWER & AUX
(22 AWG TWISTED PAIR SHIELDED) X3

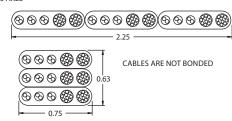
O.75

MOTOR FEEDBACK & AUX
(28 AWG, TWISTED PAIR SHIELDED X5) X2

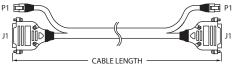
2 AXES



3 AXES



connectors and length options. Assembly Dimensions



Connectors

- Power (P1): Tin Contact TE, P/N 770904-1
 9-Pos Housing TE, P/N 172169-1
- Signal (J1): 25-Pin Amphenol, P/N L717-DB25P Metallized Shell - TE, P/N 5748677-3

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

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