

# Motion Series Plus Cable

NEED CUSTOMS?  
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- 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 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

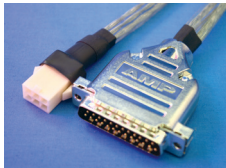
## Cable

Amp Rating <sup>1</sup>	No. of Axes	Conductor Gauge		Dimensions [inches]		Part Number
		Power	Signal	Width	Height	
7	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



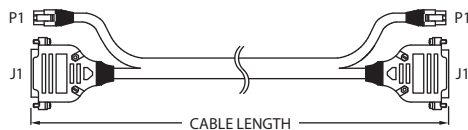
Cable Length (feet)	Part Number Addition
3	-CA003
6	-CA006
12	-CA012

### Notes

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

Please contact Cicoil for other connectors and length options.

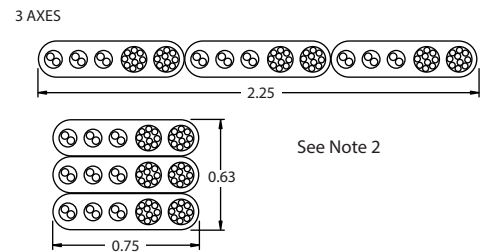
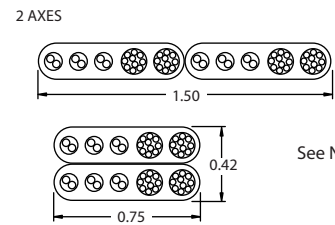
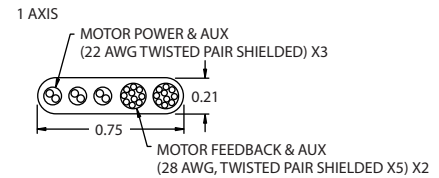
## Assembly Dimensions



### 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

## Dimensions



### Notes

2. 2 and 3 axes cables are not bonded.

## Cable Specifications

All engineering values are nominal and subject to change.

Mechanical	Environmental
<b>Conductors:</b> Ultra flexible, finely stranded, tinned copper	<b>Temperature Rating:</b> -65°C to +165°C
<b>Shielding:</b> Ultra flexible, braided shields, with 90% nominal coverage	<b>Moisture Rating:</b> Submersible, Salt Water Resistant
<b>Minimum Bend Radius:</b> - 6x cable height for intermediate flex - 10x cable height for continuous flex	<b>Clean Room Rating:</b> Class 1, Zero Particulates
<b>Flex Life:</b> 10,000,000 cycles nominal	<b>Extreme Environments:</b> Sunlight, UV Light, Alcohol, Chemical and Oil Resistant
<b>Outer Jacket Durometer Rating:</b> 65 (Shore A)	<b>Electrical</b>
	<b>Operating Voltage:</b> 300
	<b>Outer Jacket Dielectric Strength:</b> 450 volts/mil (17.7 kv/mm)
	See Electrical Rating Chart on Page 47

## Options

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