

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



**Applications**  
Linear Motors, Servo and Stepper Motors

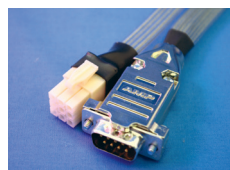
## Cable

Power Rating	Amp Rating <sup>1</sup>	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



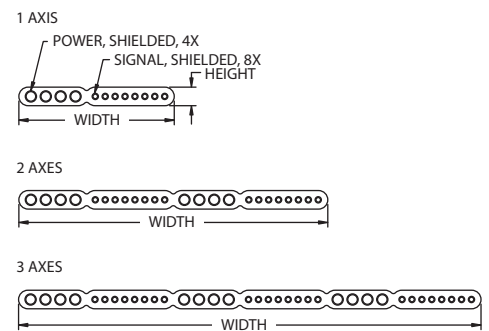
Please contact Cicoil for other connectors and length options.

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

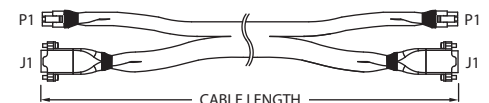
### Notes

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
<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>Outer Jacket Dielectric Strength:</b> 450 volts/mil (17.7 kv/mm)
	See Electrical Rating Chart on Page 47

## Options

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