

# Hi-Flex Motor Power Cable

- Ideal for Hi-Flex Servo Power Applications
- Rated for More Than 10 Million Flexing Cycles
- 4 Power Conductors in Shielded and Unshielded Versions

Cicoil's line of Hi-Flex Motor Cables provides the advantages of all Cicoil flexible flat cables in a standard, low-cost package. Ultraflexible, finely stranded wire conductors are used for maximum flexibility and long life in dynamic, flexing applications. Shielded conductors add tinned copper braiding over PFA insulation. Cicoil's patented extrusion process encapsulates the wire conductors in a crystal clear, flexible, yet extremely durable insulation.



Variable Frequency Drives

## Cable

	Amp	Volts DC	Conductor Gauge	Dimensions [inches]		Part
	Rating <sup>1</sup>			Width	Height	Number
	7	12,000	24 AWG	0.27	0.09	969M101-24-4-MC
	8	18,000	22 AWG	0.32	0.11	969M101-22-4-MC
	10	18,000	20 AWG	0.36	0.12	969M101-20-4-MC
sq	15	20,000	18 AWG	0.43	0.14	969M101-18-4-MC
Non-Shielded	19	20,000	16 AWG	0.48	0.15	969M101-16-4-MC
Shie	27	20,000	14 AWG	0.61	0.19	969M101-14-4-MC
-u	36	20,000	12 AWG	0.75	0.24	969M101-12-4-MC
ž	47	20,000	10 AWG	0.92	0.29	969M101-10-4-MC
	65	20,000	8 AWG	1.26	0.35	969M101-8-4-MC
	95	20,000	6 AWG	1.47	0.40	969M101-6-4-MC
	125	20,000	4 AWG	1.77	0.47	969M101-4-4-MC
	7	12,000	24 AWG	0.36	0.12	969M101-24-4-SMC
	8	18,000	22 AWG	0.41	0.13	969M101-22-4-SMC
-	10	18,000	20 AWG	0.45	0.14	969M101-20-4-SMC
qe	15	20,000	18 AWG	0.52	0.16	969M101-18-4-SMC
Shielded	19	20,000	16 AWG	0.57	0.17	969M101-16-4-SMC
	27	20,000	14 AWG	0.70	0.21	969M101-14-4-SMC
	36	20,000	12 AWG	0.84	0.26	969M101-12-4-SMC
	47	20,000	10 AWG	1.01	0.31	969M101-10-4-SMC

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.

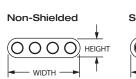
Wire Gauge	Power Connector (P1)		
22-24	Tin Contacts - TE, P/N 770902-1; 9-Pos Housing - TE, P/N 172169-1		
16-20	Tin Contacts - TE, P/N 171639-1; 9-Pos Housing - TE, P/N 172169-1		
14	Gold Contacts - MOLEX, P/N 02-09-6110; 9-Pos Housing - MOLEX, P/N 3092092		
4-10	Ring Lugs - Typical		

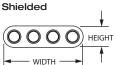
### **Cable Specifications**

All engineering values are nominal and subject to change.

Mechanical	Environmental
Conductors: Ultra flexible, finely stranded, tinned copper Shielding: Ultra flexible, braided shields, with 90% nominal coverage Minimum Bend Radius:	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
- 6x cable height for intermediate flex	Electrical
- 10x cable height for continuous flex Flex Life: 10,000,000 cycles nominal	Outer Jacket Dielectric Strength: 450 volts/mil (17.7 kv/mm)
Outer Jacket Durometer Rating: 65 (Shore A)	See Electrical Rating Chart on Page 47

#### Dimensions





## Cable Assemblies



Please contact Cicoli 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: 969M101-24-4-MC-CA003
- 2. Connector ratings may differ from cable ratings; refer to manufacturer specifications.

### Assembly Dimensions



Connectors

See Table to the left

# Options Page

Additional Conductors	
Low Friction Options	28
StripMount <sup>™</sup> Integrated Mounting Strip	28
Integrated Tubing	29
SuperTuff™ Jacket	29
Colored Jacketing	29
Strip and Tin Cable Ends	29
FlexRail™ Self-Supporting Cable	30
Complete Assembly	