

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 ¹ | | | 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.

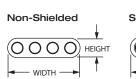
| Wire Gauge | Power Connector (P1) | | |
|------------|---|--|--|
| 22-24 | Tin Contacts - TE, P/N 770902-1; 9-Pos Housing - TE, P/N 172169-1 | | |
| 16-20 | Tin Contacts - TE, P/N 171639-1; 9-Pos Housing - TE, P/N 172169-1 | | |
| 14 | Gold Contacts - MOLEX, P/N 02-09-6110; 9-Pos Housing - MOLEX, P/N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

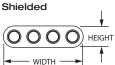
Cable Specifications

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 [™] 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 | |