

# Hi-Flex Unshielded Single Conductor Cable

**NEED CUSTOMS?**  
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- Ideal for Power Applications Requiring Voltages up to 42,000 Volts DC
- Excellent Alternative to PVC & Teflon Wire in Confined Area and Motion Applications
- Available from 4 AWG to 30 AWG

Cicoil's Hi-Flex Unshielded Single Conductor Cable is ideal for high voltage and extreme temperature applications. Ultra-flexible, finely stranded wire conductors are used for maximum flexibility and long life in dynamic, flexing applications. Cicoil's patented extrusion process encapsulates the wire conductor in a crystal clear, flexible, yet very durable Flexx-Sil™ insulation.



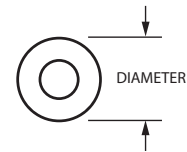
UL MEETS 94V-0    SP    CE    RoHS COMPLIANT    REACH COMPLIANT    FAA FLAMETESTED

**Applications**  
Aerospace, Solar Panel, Robotics, Medical, Oil Drilling, Wind Turbine, Welding

## Cable

Amp Rating <sup>1</sup>	Volts DC	Conductor Gauge	Diameter [inches]	Part Number <sup>2</sup>
3	10K	30 AWG	0.21	969M101-30-1
5	12K	28 AWG	0.21	969M101-28-1
6	12K	26 AWG	0.22	969M101-26-1
7	12K	24 AWG	0.22	969M101-24-1
8	31K	22 AWG	0.23	969M101-22-1
10	31K	20 AWG	0.24	969M101-20-1
15	42K	18 AWG	0.25	969M101-18-1
19	42K	16 AWG	0.26	969M101-16-1
27	42K	14 AWG	0.28	969M101-14-1
36	42K	12 AWG	0.30	969M101-12-1
47	42K	10 AWG	0.33	969M101-10-1
65	42K	8 AWG	0.39	969M101-8-1
95	42K	6 AWG	0.44	969M101-6-1
125	42K	4 AWG	0.50	969M101-4-1

## Dimensions



### Note

1. Amp rating is the maximum value for each conductor at room temperature of 70°F (21°C). Amp rating decreases as temperature increases.
2. High tensile, bare copper and silver plated conductors, insulated wires with specific color codes are available by request. Minimums may apply.

## 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: 969M101-30-1-CA003
2. Connector ratings may differ from cable ratings; refer to manufacturer specifications.

## Assembly Dimensions



### Connectors

- Signal (J1): Ring Lug

## 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>Minimum Bend Radius:</b> - 6x cable height for intermediate flex - 10x cable height for continuous flex	<b>Moisture Rating:</b> Submersible, Salt Water Resistant
<b>Outer Jacket Durometer Rating:</b> 65 (Shore A)	<b>Clean Room Rating:</b> Class 1, Zero Particulates
	<b>Extreme Environments:</b> Sunlight, UV Light, Alcohol, Chemical and Oil Resistant
	<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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