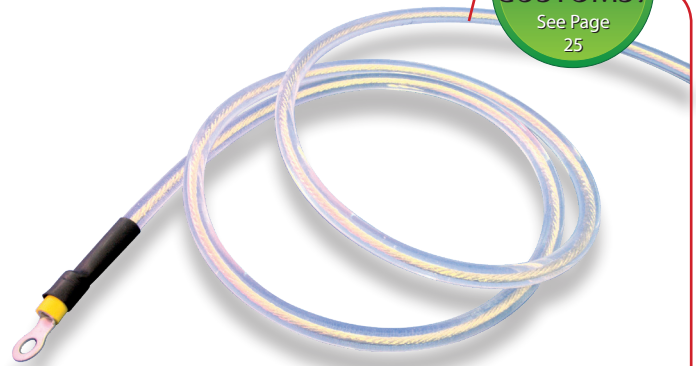


# Hi-Flex Unshielded Single Conductor Cable

**NEED CUSTOMS?**  
See Page 25

- 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
- Low Smoke/Zero Halogen (LSZH)

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.

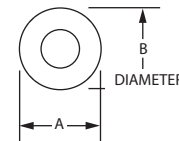


**Applications**  
Aerospace, Solar Panel, Robotics, Medical, Oil Drilling, Wind Turbine, Welding

## 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



| 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><br>- 6x cable height for intermediate flex<br>- 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>Low Smoke/Zero Halogen (LSZH):</b> Has passed testing for smoke, toxicity, flammability and halogen content, by UKAS certified lab |
|  | <b>Electrical</b>   |
|  | <b>Outer Jacket Dielectric Strength:</b> 450 volts/mil (17.7 kv/mm)   |
|  | See Electrical Rating Chart on Page 47  |

## Options

## Page

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