

# Hi-Flex Shielded Signal Cable

- Ideal for High Performance Data Transmission Applications
- Ultra Flexible for Confined Area and Continuous Motion
- Twisted Shielded Signal Pairs for Excellent EMI/RFI Protection

Cicoil's Hi-Flex Shielded Signal cables are ideal for the most demanding data transmission applications. Cicoil's patented extrusion process allows individually shielded pairs to be placed in a highly flexible flat profile, while exceeding electrical and signal requirements. These flat cable designs are an excellent alternative to bulky round and stiffer PVC or Teflon flat cable designs.



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See Page 25



**Applications**  
Sensors, Encoders, Actuators, Resolvers

## Cable

Conductor Gauge	Amp Rating <sup>1</sup>	No. of Pairs	Dimensions [inches]		Part Number
			Width	Height	
28 AWG	5	1	0.12	0.12	969M101-28-1TPS
		2	0.21	0.12	969M101-28-2TPS
		3	0.31	0.12	969M101-28-3TPS
		5	Ø0.21	Ø0.21	969M101-28-5TPS
26 AWG	6	1	0.13	0.13	969M101-26-1TPS
		2	0.23	0.13	969M101-26-2TPS
		3	0.32	0.13	969M101-26-3TPS
24 AWG	7	1	0.14	0.14	969M101-24-1TPS
		2	0.25	0.14	969M101-24-2TPS
		3	0.36	0.14	969M101-24-3TPS
22 AWG	8	1	0.15	0.15	969M101-22-1TPS
		2	0.27	0.15	969M101-22-2TPS
		3	0.40	0.15	969M101-22-3TPS
18 AWG	15	1	0.21	0.21	969M101-18-1TPS
		2	0.38	0.21	969M101-18-2TPS
		3	0.56	0.21	969M101-18-3TPS

### 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.

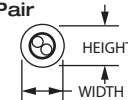
Cable Length (feet)	Part Number Addition
3	-CA003
6	-CA006
12	-CA012

### Notes

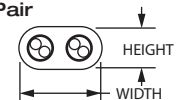
1. Append onto base cable Part Number for complete assembly.  
Example: 969M101-28-1TPS-CA003
2. Connector ratings may differ from cable ratings; refer to manufacturer specifications.

## Dimensions

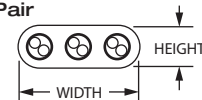
### 1 Discreet Twisted Pair



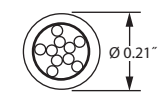
### 2 Discreet Twisted Pair



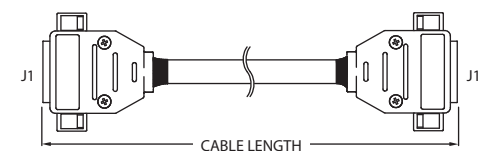
### 3 Discreet Twisted Pair



### 5X TWISTED PAIR



## Assembly Dimensions



### Connectors

Wire Gauge	Signal (J1)
28	25-Pin - Amphenol, P/N L717-DB25P Metallized Shell - TE, P/N 5748677-3
22-26	Gold Contacts - TE, P/N 745254-2 25-Pos D-SUB Housing - TE, P/N 5205208-1
18	Gold Contacts - MOLEX, P/N 02-09-6110 9-Pos Housing - MOLEX, P/N 3092092

## 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>	<b>Clean Room Rating:</b> Class 1, Zero Particulates
- 6x cable height for intermediate flex	<b>Extreme Environments:</b> Sunlight, UV Light, Alcohol, Chemical and Oil Resistant
- 10x cable height for continuous flex	<b>Electrical</b>
<b>Flex Life:</b> 10,000,000 cycles nominal	<b>Outer Jacket Dielectric Strength:</b> 450 volts/mil (17.7 kv/mm)
<b>Outer Jacket Durometer Rating:</b> 65 (Shore A)	See Electrical Rating Chart on Page 47

## Options

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