

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.



## Cable

Conductor	Amn Dating	No. of Pairs	Dimensions [inches]		Part
Gauge	Gauge Amp Rating <sup>1</sup>	NO. OI Palls	Width	Height	Number
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
	6	1	0.13	0.13	969M101-26-1TPS
26 AWG		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  $70^{\circ}F$  ( $21^{\circ}C$ ). Amp rating decreases as temperature increases.

### Cable Assemblies



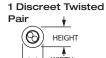
Please contact Cicoil for other connectors and length options.

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

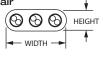
#### Notes

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

## **Dimensions**



3 Discreet Twisted Pair



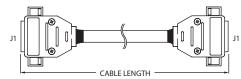
2 Discreet Twisted Pair



**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	2-26	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

**Conductors:** Ultra flexible, finely stranded, tinned copper

**Shielding:** Ultra flexible, braided shields, with 90% nominal coverage

#### Minimum Bend Radius:

- 6x cable height for intermediate flex

- 10x cable height for continuous flex Flex Life: 10,000,000 cycles nominal

Outer Jacket Durometer Rating: 65 (Shore A)

# Environmental

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

## Electrical

Outer Jacket Dielectric Strength: 450 volts/mil (17.7 kv/mm)

See Electrical Rating Chart on Page 47

# Options

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