

## Fiber Channel (FC) Cables or FCN

This article provides a knowledge base to off-the-shelf FC cable assembly vendors and FC cable products and building techniques (FCN)

### Off The Shelf Cable Assembly Solutions

**Note: These cable are for short length lab testing only as the wiring is not TSP and not a good choice for lengths over 3 meters.**

#### List of Vendors

1. **CS Electronics**

17500 Gillette Ave.  
Irvine, California 92614  
(949) 475-9100  
FAX: (949) 475-9119  
[www.cselex.com](http://www.cselex.com)



P/N: 3-Pin PTP Internal Cable

2. **Sierra Technologies, LLC**

Phone: 813-929-9125 or 410-569-7151  
Fax: 813-929-9076  
[www.sierra-cables.com](http://www.sierra-cables.com)



P/N: Pont-To-Point (PTP)

## Materials To Build Your Own Cable

### Twinax Cable

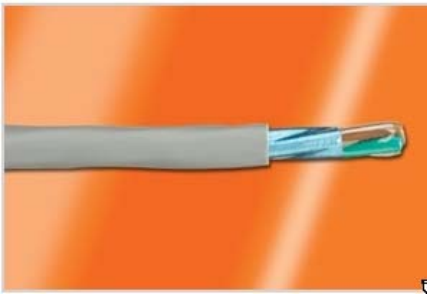
Description: Minimum 24AWG, 2 Conductor, TSP (Twisted shielded Pair), 100-150 ohm.

Recommendations:

Pic Wire P/N E10224 for single pair and E10424 for double pair.

or

Item # 919-28XV, LTE high-speed twinaxial cables - 100 ohm parallel and twisted pair



TSP Cable

### 3-Pin FC Connector Housing

Description: 3-Pin Connector Housing (mates to GRT FCN connectors)

Amp Part Number: 102241-1

[www.amp.com](http://www.amp.com)

Digikey Part Number: A26982-ND

[www.digikey.com](http://www.digikey.com)



3-Pin Connector Housing

### Contact for 3-Pin Housing

Description: Contact, 20-24GA wire, High Pressure

Amp Part Number: 1-87309-4

[www.amp.com](http://www.amp.com)

Digikey Part Number : A3008-ND

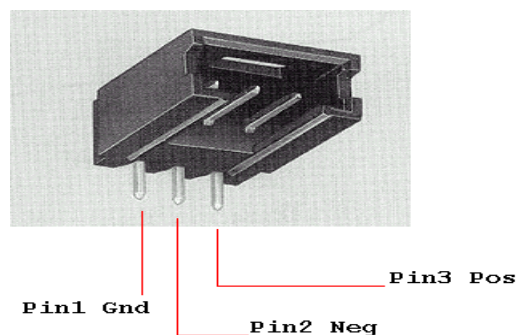
[www.digikey.com](http://www.digikey.com)



20-24 AWG Contact

### How To Build Your Point-To-Point Cable

When building the cable harness it is necessary to note the pin out on the GRT FCN style connector. The pin out and signal description for each the 3 pins is noted in the figure below.



GRT FCN Connector  
(Front View)

The GRT FCN Connector and the 3-Pin Connector Housing are keyed so that Pin1 (GND) and Pin3 (Pos) can never be swapped. When building the cable ensure that Pin1 (GND) connects to Pin1 (GND) at the other end and like wise for Pin2 and Pin3. Reversing the polarity may give mixed results, so please PAY ATTENTION.

The Twinax (TSP) cable shall be connected to the Connector Housing in the following manner:

<u>Twinax (TSP)</u>	<u>Connector Housing</u>
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Shield -----	Pin1 (Gnd)
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White -----	Pin2 (Neg)
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Blue/White -----	Pin3 (Pos)
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