

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









Factory Line Accessories FL PLUG RJ 45 ... FL CRIMPTOOL

1. Description

FL PLUG RJ 45 ... connectors and the corresponding FL CRIMPTOOL crimping pliers are available for field terminations of RJ45 connectors.

The shielded FL PLUG RJ45... connector enables the easy connection of an Ethernet cable. It can be connected to solid or flexible individual wires in a variety of ways. It is thus possible to assemble either patch cables or permanently installed field cables with just one connector.

Due to the high-quality shield connection and reduced crosstalk, the connector meets requirements of CAT 5+ (up to 125 MHz).

The connector set (2 connectors) with the gray bending protection bushing is designed for uncrossed connections. The connector set with the green bending protection bushing is designed for crossed connections.

The high-quality FL CRIMPTOOL crimping pliers are used to safely prepare FL PLUG RJ45... RJ45 connectors from Phoenix Contact.

The replaceable crimping cutter enables the pliers to be quickly adapted to various requirements. A wide selection of crimping cutters is available for various uses, from ferrules through to complex connector inserts.

Another special feature is the linear action crimping principle. The crimping profiles move together in a highly precise linear movement. In this way, the crimping contacts are formed in parallel and are therefore completely symmetrical. The result is perfect connections. The FL CRIMPTOOL is fitted with a control lock. This releases when the required molding pressure is reached, therefore ensuring sufficient pressure is applied during crimping.



Should you have any technical questions, please contact us:

PSM HOTLINE: +49 - 52 35 - 31 98 90

FAX: +49 - 52 35 - 31 98 99

E-mail: interface-service@phoenixcontact.com

2. Technical Data



FL PLUG RJ45 FL CRIMPTOOL

Description	Туре	Order No.	Pcs. Pkt.
RJ45 connector, shielded, with bending protection bushing, 2 pieces • Gray for straight cable • Green for crossover cable	FL PLUG RJ45 GR/2 FL PLUG RJ45 GN/2	27 44 85 6 27 44 57 1	1 1
Crimping pliers, for assembling the RJ45 connectors	FL CRIMPTOOL	27 44 86 9	1
Stripping tool	CYCLOPS	12 04 48 1	1
Stripping knife	Kames optical fiber	12 06 14 6	1

Technical Data

FL PLUG RJ 45...

Connection options including insulation

Connector cycles Contact material Insulating material Flammability class in accordance with UL 94 Temperature Dimensions Approvals

FL CRIMPTOOL

Dimensions

1 mm (0.039 in.) individual wire 5.4 mm (0.213 in.) entire cable > 2500 with Factory Line devices Phosphor bronze with 50 μm gold coating Polycarbonate V0 $-40^{\circ}C$ to +85°C (-40°F to +185°F) 12 mm x 27 mm x 7.5 mm (0.472 in. x 1.063 in. x 0.295 in.) UL File E132408(N)-DUXR2, CSA File 67725

220 mm x 75 mm x 32 mm (8.661 in. x 2.953 in. x 1.260 in.)

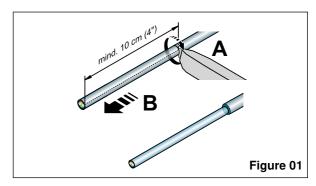
3. Assembly Instructions for ETHERNET Cable With RJ45 Connector

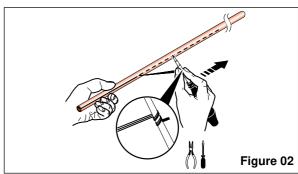


If the double sheathed Ethernet cable type "FL CAT5 HEAVY..." is not used, omit the first configuration step and start with the second step.

3.1. Removing the Double Sheath

- Cut at least 10 cm (3.937 in.) along the cable towards the end using a suitable stripping knife (e.g., "KAMES LWL"; Order No. 12 06 14 6).
- Twist the tearing wire around a supporting tool (e.g., screwdriver, pliers) and make sure it is secure. Now tear open the double sheath to the desired length.
- Use a sharp diagonal cutter to cut off the sheath and the tearing wire without damaging the inner sheath.



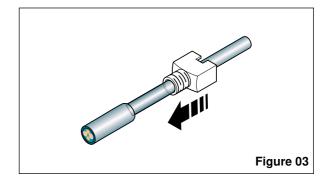


3.2. Pushing on the Protective Cap

Push the protective cap onto the cable as illustrated.

Observe the colors for the corresponding application:

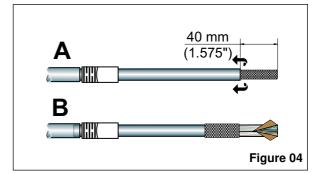
- Gray for line cables
- Green for crossover cables.



3.3. Stripping the Cable and Bending Back the Braided Shield

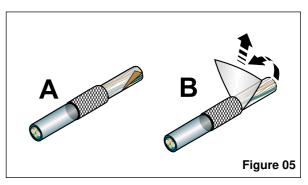
Remove 40 mm (1.575") of the sheath using a suitable stripping knife (e.g., "CYCLOPS", Order No. 12 04 48 1) (A).

Bend the braided shield back around the cable. The shielding should cover the cable as closely as possible (B).



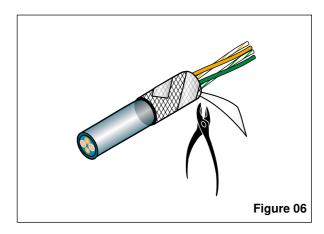
3.4. Removing the Protective Foil

Spread the foil along the overlap (A). Bend the foil upwards and then tear it off (B).



3.5. Removing the Protective Foil

Cut off the transparent protective foil as short as possible, e.g., with a diagonal cutter.

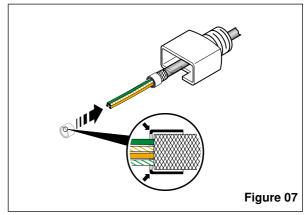


3.6. Pushing on the Shield Ring

Push the shield ring over the braided shield and protective foil.

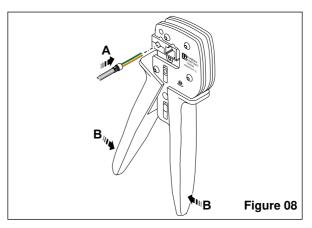


Keep the rounded side of the shield ring facing towards the individual wires.



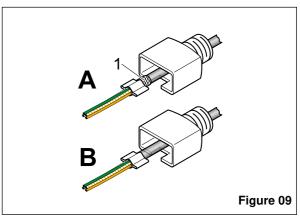
3.7. Pressing the Shield Ring

Press the shield ring using the "FL CRIMPTOOL" pliers (Order No. 27 44 86 9).



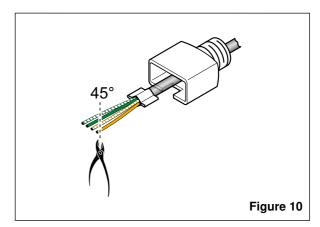
3.8. Cutting off the Braided Shield

Cut off the protruding braided shield cleanly (1).



3.9. Cutting off the Cables at an Angle

Cut off the cables at an angle of approximately 45°.

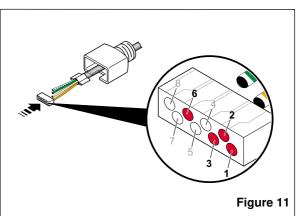


3.10. Wiring the Cables in the Management Bar

Wire up the cables in the management bar. Observe the assignment for the various cable types (see Sections 3.11 and 3.12).

3.10.1. Connection Between the Network Components

Line 1:1 = gray protective caps Crossover = green protective caps	PC/RFC	IBS gateway	I/O bus terminal module	Switch	Hub	Medium converter
PC/RFC	Cross	Cross	Cross	Line	Line	Line
IBS gateway	Cross	Cross	Cross	Line	Line	Line
I/O bus terminal	Cross	Cross	Cross	Line	Line	Line
Switch	Line	Line	Line	Cross	Cross	Cross
Hub	Line	Line	Line	Cross	Cross	Cross
Medium converter	Line	Line	Line	Cross	Cross	Cross

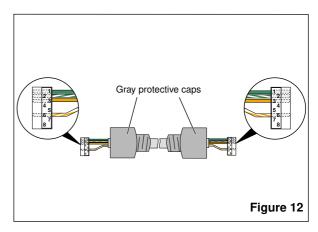


3.11. Line Cable (1:1) (Gray Protective Caps)

For connecting active network components to terminal devices (e.g., from the hub to the PC)

Cable assembly:

	 , ·	
(1)	 Green	 (1)
(2)	 Green/white	 (2)
(3)	 Orange	 (3)
(6)	 Orange/white	 (6)

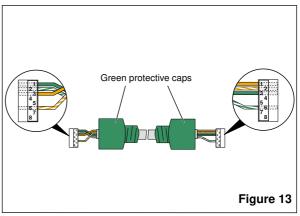


3.12. Crossover Cable (Green Protective Caps)

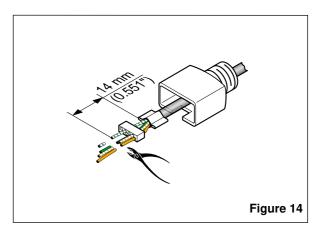
For connecting active network components (e.g., hubs, switches, medium converters, etc.)

Cable assembly:

	 ,		
(1)	 Green	 (3)	
(2)	 Green/white	 (6)	
(3)	 Orange	 (1)	
(6)	 Orange/white	 (2)	



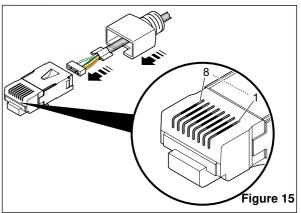
Cut off the cables at a right angle to a maximum total length of 14 mm (0.551").



3.14. Inserting the Management Bar in the Connector

Pull back the management bar until it reaches the cable ends. Then insert the cable with the management bar into the connector from behind.

From the front side of the connector, ensure that all of the cables are in the correct position and are completely under the crimping contacts.



3.15. Crimping the Connector

Insert the connector in the open pliers.

Ensure that the connector is locked in the pliers (A).

Crimp the connector (B).

The crimping process is complete when the hand grips automatically spring back into their original position.

