

3M™ Industrial RJ45 Modular Plug for Ethernet, 3R108-0000-000CE

Assembly Instructions

1.0 General

The 3M Industrial RJ45 Modular Plug is based on the standard RJ45 pin profile and was developed specifically for use in rugged industrial IP 20 environments using double-shielded enhanced category 5 (Cat 5e) cabling. 3M's 50-year, award-winning, insulation displacement contact (IDC) technology incorporated into the RJ45 modular plug allows a reliable and easy termination process without the need to strip the wires. This RJ45 modular plug can be terminated in the field using only a pair of pliers.

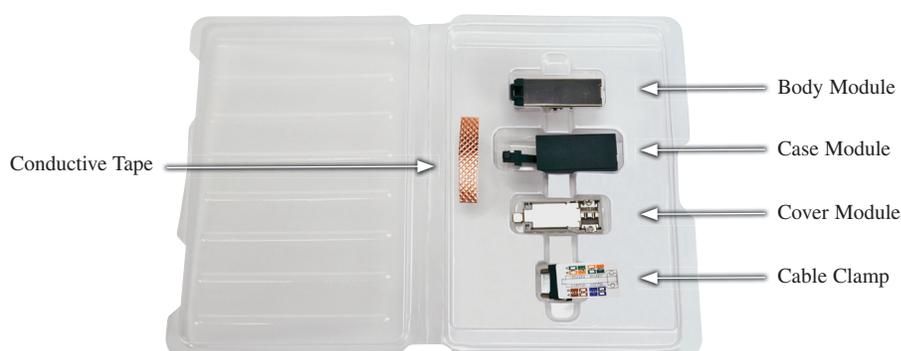


Figure 1

2.0 Product Information

- These assembly instructions apply to 3M part number 3R108-0000-000CE.
- Compatible cable includes enhanced category 5 (Cat 5e) cable as follows:

Cable Size	AWG # 24 Solid of stranded (7 wire); AWG # 26 stranded (7 wire)
Cable Ground	Double-shielded cable with braided shield or drain
Cable Diameter	6.8 mm max. Add spacers for thin cables if necessary.

- To prevent damage, a hand tool with a flat clamping surface is recommended. Upon using a set of pliers, place a plastic plate in between the pliers and the connector.
- Package components are outlined in Figure 1.

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3.0 Cable Prep

3.1 Slide case module onto cable. (Figure 2)



Figure 2

3.2 Trim outer jacket approximately 50 mm. (Figure 3)



Figure 3

3.3 Fold back braided shield or drain wire and remove foil shield. (Figure 4)



Figure 4

3.4 Attach conductive tape over the braided shield or drain wire at the edge of the cable jacket. Trim off excess braid. Add spacers onto the cable if necessary. Be sure no braided shielding comes out of the end of the conductive tape. (Figure 5)

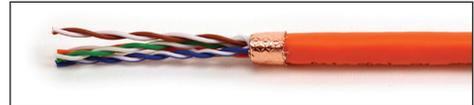


Figure 5

4.0 Termination Process

4.1 Set cable onto the cover module so the conductive tape fits into the ground. (Figure 6)

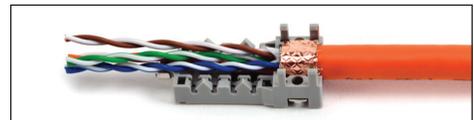


Figure 6

4.2 Attach cable clamp so the wiring diagram image matches the connector. (Figure 7)

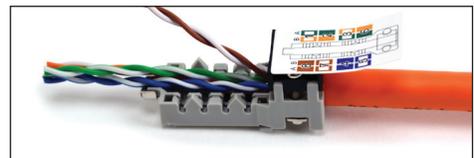


Figure 7

4.3 Remove the wiring diagram and fasten screws with a screwdriver. Make sure the cable is firmly secured and there are no gaps between the modules. (Figure 8)

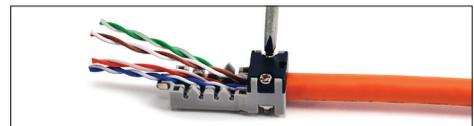


Figure 8

4.4 Place wires into the slots of the cover module following the wiring diagram. There is no need to untwist the wires. Confirm that the wires are positioned and secured at the bottom of the slots. (Figure 9)

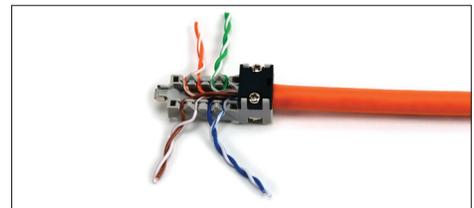


Figure 9

4.5 Place the body module onto the cover module in a parallel fashion. (Figure 10)



Figure 10

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- 4.6 Squeeze the connector with a hand tool to terminate the wires.
(Figure 11)

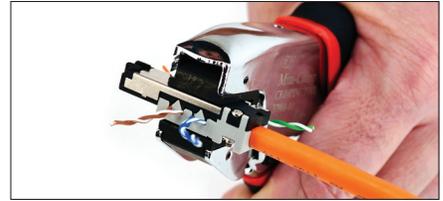


Figure 11

- 4.7 Trim the excess wires coming out of the sides of the connector.
(Figure 12)



Figure 12

- 4.8 Fasten case module onto connector. Continue to push forward until you hear a clicking sound. Attach end of latch onto body module. Push down until you hear a clicking sound. (Figure 13)



Figure 13

- 4.9 Check electrical performance of the cable assembly.

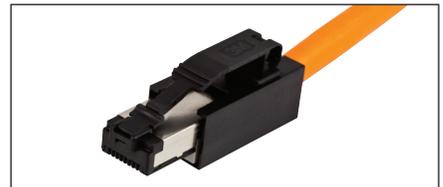


Figure 14

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