

Revised Feb-20-2008

Sealed Industrial Ethernet Circular IP67 RJ45 Connector System

Description

The sealed circular RJ45 connector system is designed for use in harsh environments. The connector features bayonet coupling mechanism conforming to IEC 61076-3-106 standard. It provides fast but reliable connections in harsh environment. The Connector can be front or rear mounted into a panel with a thickness of up to 3.2mm. The integrated shielded RJ45 Jack and Plug meet EIA/TIA-568B.2 cat. 5e specifications. The connector system provides IP67 sealing performance when the connector halves are fully mated or covered. The potted version provides IP67 even under the unmated and uncovered conditions.

Two different versions (Industrial to Industrial and Industrial to Standard) of the RJ45 cat. 5e Ethernet patch cords with various lengths for tough and outdoor applications are also offered. The connectors are available in plastic and metallized plastic versions. The products are **ROHS** compliant.

Applications

- Industrial Machinery, CNC Machines
- Communication Equipment
- Food and Chemical Process Equipment
- Railway Network System
- Oil Exploration
- Industrial Process Control

Electrical Specifications

- Meets EIA/TIA-568-B.2 Cat. 5e Specification
- IR: 500M Ω min. @ 100 VDC
- DWV: 1000 V DC/60s Contact to Contact
- DWV: 1500 V DC/60s Contact to Metal Shell

- Diagnostic Equipment
- Printers, Display
- Factory Automation, Robotics
- Outdoor Telecom System
- Entertainment
- Video Control, Motion Control
- Contact Resistance: 20mΩ max.
- Current Rating: 1.2A max. at 25°C
- Working Voltage: 100 V
- Operating Temperature: -40°C to +85°C

Materials and Finish

- Receptacle Housing: PBT (Black) or metallized ABS (Nickel plated); UL94 V-0
- Panel Nut: Brass, Finish: Nickel Plated
- Panel Gasket: Silicone, Color: White
- RJ45 Jack Metal Shell: Copper Alloy, Finish: Nickel Plated
- RJ45 Jack Housing: PBT (Black), UL94 V-0
- RJ45 Jack Contact: Phosphor Bronze, Finish: 50u" Gold min. over Nickel
- Plug Coupling Ring: PBT (Black) or metallized ABS, UL94 V-0 or Zinc Die-Cast (Nickel plated)
- Plug Housing: PBT (Black) or metallized ABS (Nickel plated); UL94 V-0,
- Cable Gland Body: PA (Black) UL94 V-0 or Brass, Nickel Plated
- Cable Gland Seal: NBR, Color: Black
- Cable Gland Insert (Metal Version): Nylon, Color: White
- Interfacial Seal: Silicone, Color: White
- Cover Gasket: Silicone, Color: Red
- RJ45 Plug Metal Shell: Copper Alloy, Finish: Nickel Plated
- RJ45 Plug Housing: Clear Polycarbonate, UL94 V-0
- RJ45 Plug Contact: Phosphor Bronze, Finish: 50u" Gold min. over Nickel
- Protective Cover: PBT (Black) or metallized ABS (Nickel Plated); UL94 V-0
- Tether: PE, Color: Black
- Patch Cord Cable: UTP or STP Cat. 5e, AWG24 Solid; Color: Black
- RJ45 Modular Boot: PVC, Color: Black



Product Overview and Dimensions (in mm)

1: Cat. 5e RJ45 Inline Coupler Receptacle Assembly Kit (P/N: see below)



2: Cat. 5e RJ45 IDC Jack Receptacle Assembly Kit (P/N: see below)





Shielded Cat. Se RJ45 PCB Jack 37.75 REF Flance ealed with Epoxy, provides Panel Panel (Plastic or Metallized) IP67 even when uncovered Gasket Nut Receptacle Housing (For Fully Potted Version) Flat Edge Ø34.00 Bayonet Channel x 3 3.05 26.50 -32.00 12.60 Ø27.80 ± 0.05 36.18 19.40--2.00 Recommended Panel Cutout Plastic Version with Shielded Cat. 5e RJ45 PCB Jack P/N: 17-10017 Metallized Plastic Version with Shielded Cat. 5e RJ45 PCB Jack P/N: 17-10018 Potted Plastic Version with Shielded Cat. 5e RJ45 PCB Jack P/N: 17-10035 Potted Metallized Plastic Version with Shielded Cat. 5e RJ45 PCB Jack P/N: 17-10036

3: Cat. 5e RJ45 PCB Jack Receptacle Assembly Kit (P/N: see below)

4: Cat. 5e RJ45 Plug Kit (P/N: see below)





5: Protective Cover Assembly (P/N: see below)



6. The Receptacle + Protective Cover Assembly Kit (P/N: see below)







8. The Industrial to Industrial RJ45 Cat. 5e Ethernet Patch Cord (P/N: see below)





-^/- L ± 0.05 -WW nnnaa **Part Number** L Plastic version Metallized Version **Die-cast Version** (Black UTP Cable) (Black STP cable) (Black STP cable) 2 M 17-10006 17-10028 17-100544 4 M 17-10007 17-10029 17-100554 5 M 17-10008 17-10030 17-100564 UTP: Unshielded Twisted Pair; STP: Shielded Twisted Pair

9. The Industrial to Standard RJ45 Cat. 5e Ethernet Patch Cord (P/N: see below)

10. The Strain Relief to Standard RJ45 Cat. 5e Ethernet Patch Cord (P/N: see below)





- L ± 0.05 -WW TOTOD aaaba Part Number L Black UTP cable Blue UTP cable Red UTP cable 17-100654 17-100684 17-100714 2 M 17-100664 17-100694 17-100724 4 M 17-100674 17-100704 17-100734 5 M Part Number L Green UTP cable Yellow UTP cable White UTP cable 2 M 17-100744 17-100774 17-100804 17-100754 17-100784 17-100814 4 M 17-100764 17-100794 17-100824 5 M UTP: Unshielded Twisted Pair

11. The Standard to Standard RJ45 Cat. 5e Ethernet Patch Cord (P/N: see below)

12. The Modular Plug Termination Tool (P/N: 360X30029X)



13. The Network Multi-Modular Cable Tester (P/N: 360X30039X)





14. The110 Type Punch-Down Tool (P/N: 360X30049X)



15. The Shielded Cat. 5e RJ45 Plug (P/N: 391J00039X)



16. The RJ45 Modular Boot (P/N: see below)

Color	Black	Blue	Green
Part Number	795-601302	795-601303	795-601304
Color	Yellow	Red	White
Part Number	795-601305	795-601306	795-601307