



# RJ-45 EtherNet/IP\* Overmolded Cordsets, IDT and PCB Receptacles

84702

**Reliably Connect to EtherNet Devices, Even in Harsh Environments, with Molex's RJ-45 Industrial EtherNet/IP Cordsets**

RJ-45 Ethernet/IP Cordsets and Receptacles are ideal for use in environments where EtherNet protocol is used, including manufacturing facilities, water treatment plants and transportation hubs. Designed with one sealing surface, the connectors ensure optimum performance even in harsh environments.

The overmolded cordsets and IDT and PCB receptacles meet the EtherNet/IP Specifications of both the Open DeviceNet<sup>†</sup> Vendors Association and ControlNet<sup>‡</sup> Vendors Association.

\*EtherNet/IP and †DeviceNet are trademarks of the Open DeviceNet Vendor Association. For more information, visit: [www.odva.org](http://www.odva.org)  
‡ControlNet is a trademark of ControlNet International, Ltd. For more information, visit: [www.controlnet.org](http://www.controlnet.org)



(Left to right) Punchdown Receptacle (side view), Overmolded Cordset and PCB Mounting Receptacle

**Features and Benefits**

- One sealing surface reduces chance of failure
- Bayonet style latch receptacle provides quick and easy connections as well as ensures proper depth when mating
- IP 67 and NEMA 6P ratings ensure cordsets are water and dust tight for functional integrity
- Category 5e specified<sup>§</sup> provides high data-transmission speeds
- Overmolded versus field wireable cordsets allow faster installation at customer site

<sup>§</sup>Note: Category 5e specified for: Industrial EtherNet RJ-45 Panel Mounting Receptacle, Punchdown Receptacle and RJ-45 Molded Cordsets



(Left to right) Punchdown Receptacle (bottom view), Overmolded Cordset and top view of PCB Mounting Receptacle

SPECIFICATIONS

**Reference Information**

Packaging: Bag  
Mates With: 84700 series  
Designed In: Inches

**Electrical**

Voltage: 150V AC (125V AC for receptacles)  
Current: 1.5A  
Contact Resistance: 20 mΩ max.  
Dielectric Withstanding Voltage:  
    1,000 VAC (adjacent contacts)  
    1,500 VAC (contacts to ground)  
Insulation Resistance: 500 MΩ min.

**Mechanical**

Durability: 200 Cycles  
Coupling Ring Destructive Torque:  
    2.26 N-M (20 in-lbs. or more)  
Lock Nut Destructive Torque (Receptacles):  
    2.71 N-M (24 in-lbs. or more)  
Wire Range (Punchdown Receptacle): 22 to 26 AWG  
    solid and stranded, limiting Outside Diameter  
    1.40 mm (0.055")

**Physical**

Housing: PBT Polyester, black  
Contact: Phosphor Bronze (CuSn)  
Plating:  
    Contact Area — 1.27µm (50µ") Gold (Au)  
    Underplating — Nickel (Ni)  
Operating Temperature: -40 to +85°C



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**84702**

- Industrial Environment
  - Food and beverage
  - Automotive
  - Chemical
  - Other continuous and batch processes
- Water Treatment Plants
  - Waste water
  - Municipal drinking water
- Transportation Hubs
  - Airports
  - Bus stations
  - Rail stations



**ORDERING INFORMATION**

Order No.	Description
84702-0005	Ethernet/IP, RJ-45, PCB Mount Receptacle
84702-0007	Ethernet/IP, RJ-45, PCB Mount Receptacle Jack, Potted Sealed Backend
84702-0006	Ethernet/IP, RJ-45, Punchdown Panel Mount Receptacle Jack
84702-0008	Ethernet/IP, RJ-45, Punchdown Panel Mount Receptacle Jack, Potted Sealed Backend

Order No.	Description
84702-1020	Ethernet/IP Plug, RJ-45 Double Ended Bayonet Style Cable, 6.10m (20')
84702-1XXX**	Ethernet/IP Plug, RJ-45 Double Ended Bayonet Style Cable
84702-2XXX**	Ethernet/IP Plug, RJ-45 Double Ended Bayonet Style Cable to RJ-45 Plug
84702-3XXX**	Ethernet/IP Plug, RJ-45 Single Ended Bayonet Style Cable to RJ-45 Plug

\*\*Last three digits represent the length of cable in feet. For example: 84702-1020 is a 20' cordset.

**Americas Headquarters**  
Lisle, Illinois 60532 U.S.A.  
1-800-78MOLEX  
amerinfo@molex.com

**Far East North Headquarters**  
Yamato, Kanagawa, Japan  
81-462-65-2324  
feninfo@molex.com

**Far East South Headquarters**  
Jurong, Singapore  
65-6-268-6868  
fesinfo@molex.com

**European Headquarters**  
Munich, Germany  
49-89-413092-0  
eurinfo@molex.com

**Corporate Headquarters**  
2222 Wellington Ct.  
Lisle, IL 60532 U.S.A.  
630-969-4550  
Fax:630-969-1352

Visit our Web site at <http://www.molex.com/product/io/rj45ethernet.html>