

Harsh Duty Ethernet Connectors and Cabling

Overview

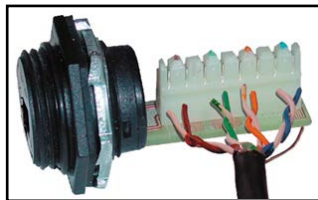
By combining standard RJ-45 connection technology with the industrially-proven mini form factor, these Industrial Ethernet Connectivity products provide a line-up designed to safeguard the integrity of your data even in the harshest manufacturing, processing or commercial settings.

Features

- Environmental Sealing
- Vibration Resistance
- Secure Robust Connections
- Performance in Electrically Noisy Conditions

Receptacles

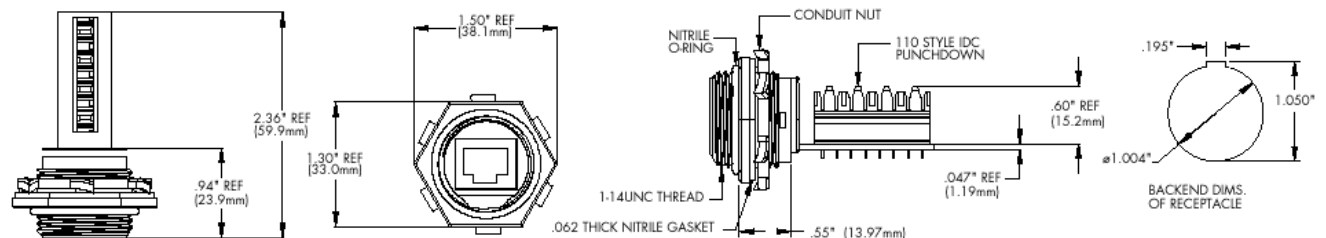
The following receptacles offer solutions for Ethernet field device connectivity, regardless of the operating environment. All receptacles are compatible with commercial RJ-45 connectors, enabling one solution for both harsh and benign environments.



110 Punchdown Block

Simple termination via Insulation Displacement Connections (IDC) with the use of commonly available punchdown tools. Ideal for premise wiring applications.

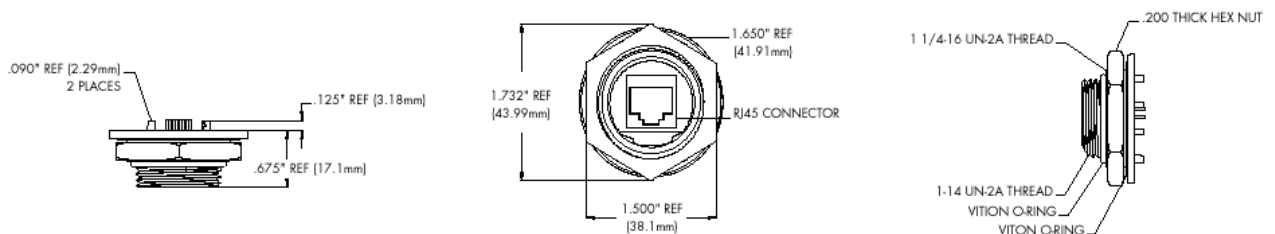
ENDR2FB5110 receptacle, 568A and 568B wiring, back-side locking nut



Direct PCB Mount Receptacle

Short depth receptacle that solders directly to a Printed Circuit Board (PCB)-intended for OEMs who wish to incorporate a robust, sealed connection into their field equipment.

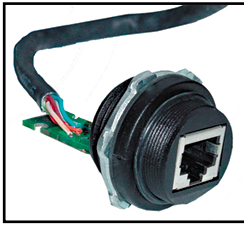
ENPR1FF5Direct PCB-mount, 8-pin through-hole receptacle, front coupling nut





Closure Cap

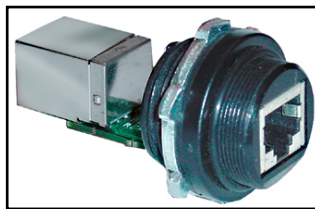
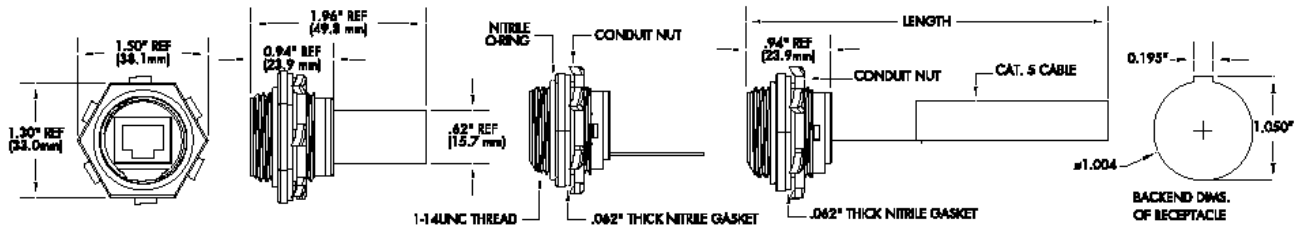
Maintains sealing integrity when a connector is not mated with the receptacle.
67-0300 IP67 rated closure cap with lanyard



Standard PCB Board Receptacle

Highly flexible, enables an OEM or end-user to solder a cable lead to an internal Ethernet connection.

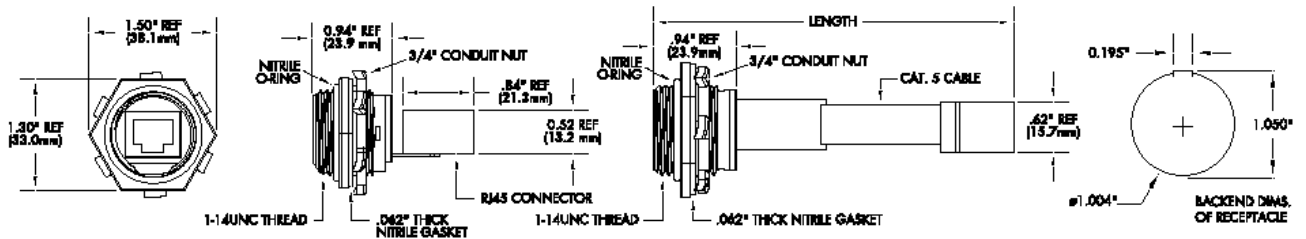
ENSR1FB5..... Receptacle with PC board
ENSR1FB5C305 Receptacle with PCB & 12" of cable (10Base-T)



Bulkhead Passthrough

To bring Ethernet into a cabinet or control box, simply create the sealed connection on the outside of the enclosure, and run a commercial patch cord from the backside RJ-45 jack to your PLC, I/O, or Ethernet Control Board. No conduit entry is required.

ENSP1F5RJ-45 Bulkhead passthrough with backside jack
ENSP1F5C305....RJ-45 Bulkhead passthrough with 12" of patch cord



Receptacle Specifications

O-Ring Material:	Nitrile Rubber
Receptacle Shell Material:	Acrylonitrile-Butadiene-Styrene (ABS)—standard version
Knockout Hole for Receptacle:	1.031
Mating Thread:	UNC 1" - 14
Operating Temperature:	-20 to 80 °C
Return Loss:	5 dB @ 100 MHZ
Shock/Vibration:	Per IEC 60068-2-6
Environmental Rating:	IEC IP67
TIA/EIA Rating	
110 Punchdown:	Category 5e compliant
Bulkhead Passthrough:	Category 5e compliant
Direct PCB Mount:	Category 5 compliant
Standard PC Board:	Not Rated—additional customer termination is required
RJ-45 Jack	
Base Material:	Copper alloy w/30 μ -inches, gold alloy
Underplating:	2.54 microns of nickel
Mating Cycles:	250, minimum
Current Rating:	1.5 Amp
Voltage Rating:	125 VDC

Cordsets

Cordsets utilize a standard RJ-45 plug, but add strain relief and a locking mechanism that creates a seal when mated with a receptacle. Cordsets can be ordered to length as an overmolded cordset, or as an attachable device that can be assembled in the field.

Overmolded Cordsets are available in two configurations. When both cord ends are in a harsh environment, order with two industrial sealed connectors; for a cable with one end in a harsh environment, and the other in a sealed or office area, order with one industrial connector and one commercial grade plug for a better fit into a standard patch panel.

ENS1115M020..... Male Industrial to Male Industrial RJ45, 2 meter, 10 Base-T, 4 conductor

ENS1115M040..... Male Industrial to Male Industrial RJ45, 4 meter, 10 Base-T, 4 conductor

ENS1115M050..... Male Industrial to Male Industrial RJ45, 5 meter, 10 Base-T, 4 conductor

ENS1135M020..... Male Industrial to Male Standard RJ45, 2 meter, 10 Base-T, 4 conductor

ENS1135M040..... Male Industrial to Male Standard RJ45, 4 meter, 10 Base-T, 4 conductor

ENS1135M050..... Male Industrial to Male Standard RJ45, 5 meter, 10 Base-T, 4 conductor

ENS2115M020..... Male Industrial to Male Industrial RJ45, 2 meter, 568A, 8 conductor

ENS2115M040..... Male Industrial to Male Industrial RJ45, 4 meter, 568A, 8 conductor

ENS2115M050..... Male Industrial to Male Industrial RJ45, 5 meter, 568A, 8 conductor

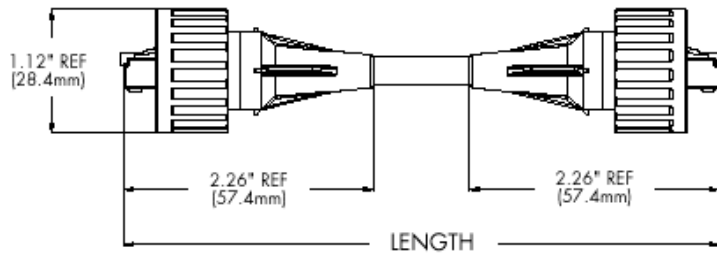
ENS2135M020..... Male Industrial to Male Standard RJ45, 2 meter, 568A, 8 conductor

ENS2135M040..... Male Industrial to Male Standard RJ45, 4 meter, 568A, 8 conductor

ENS2135M050..... Male Industrial to Male Standard RJ45, 5 meter, 568A, 8 conductor

Connector Specifications

Insert Material:	Acrylonitrile-Butadiene-Styrene (ABS)
Overmold Material:	Polyurethane (Solid Core & Proplex)
Coupling Nut Material:	Acrylonitrile-Butadiene-Styrene (ABS)—standard version Acrylonitrile-Styrene-Acrylate (Luran™ S778 T/TE)—UV stabilized version
Recommended Mating Torque:	12-inch-lbs.



Field Attachable Connector



Assemble the connection in the field using a standard crimping tool, and still enjoy the same IP67 sealed connection as the overmolded cordset. One thousand foot bulk cable put-ups are available for both Solid Core PUR and Proplex cable.

ENSAM315 Field attachable RJ-45 connector for solid core C5 cable

ENQAM315..... Field attachable RJ-45 connector for stranded core C5 cable

