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!

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Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

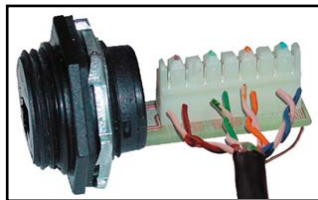# Harsh Duty Ethernet Connectors and Cabling

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
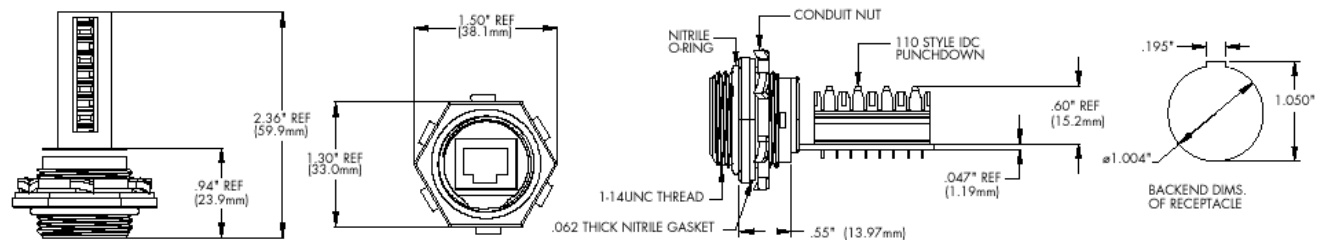- Performance in Electrically Noisy Conditions

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.
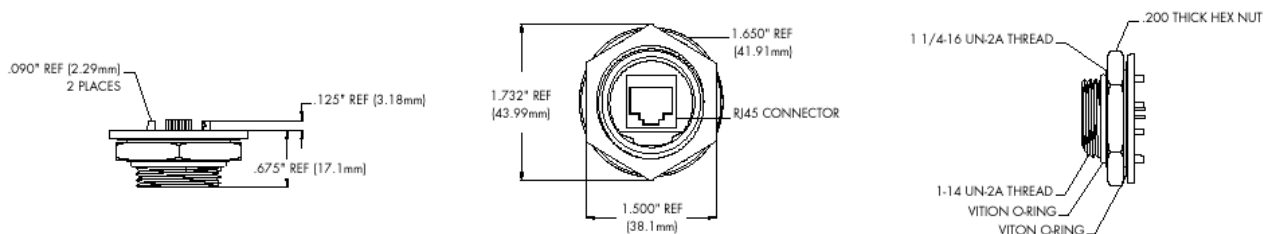
ENDR2FB5 ....110 receptacle, 568A and 568B wiring, back-side locking nut
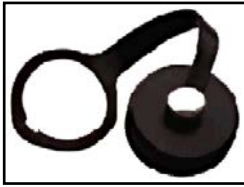
Direct PCB Mount Receptable

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.
ENPR1FF5..........Direct PCB-mount, 8-pin through-hole receptable, front coupling nut
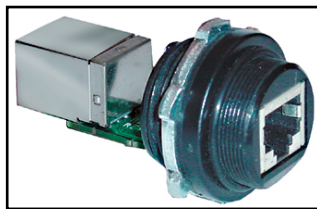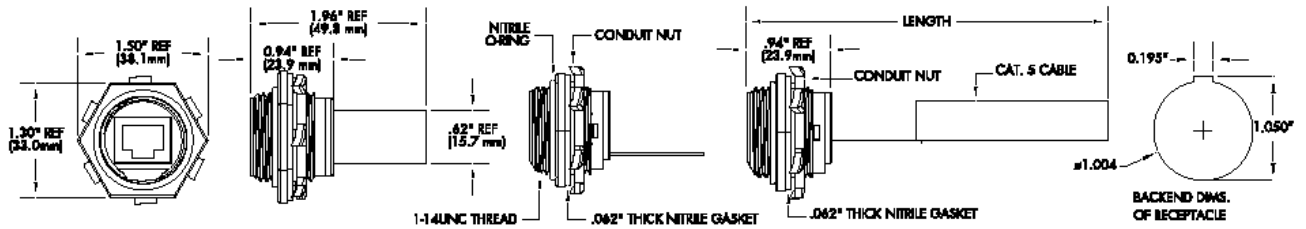
Closure Cap

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

Standard PCB Board Receptacle

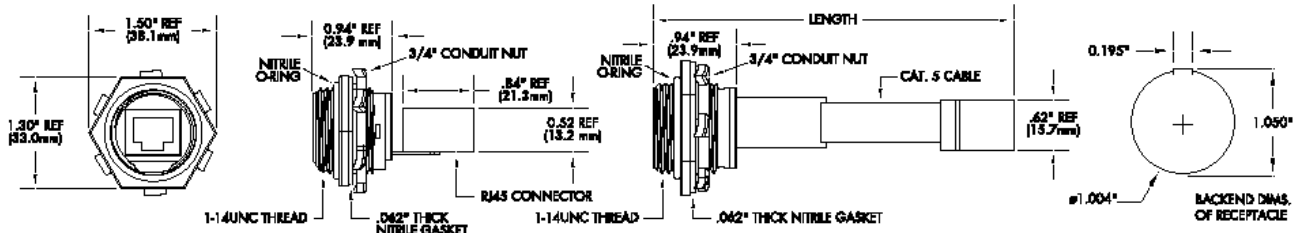Highly flexible, enables an OEM or end-user to solder a cable lead to an internal Ethernet connection.
ENSR1FB5............. Receptacle with PC board
ENSR1FB5C305 .... Receptacle with PCB & 12" of cable (1oBase-T)

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.
ENSP1F5 ....RJ-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

B&B ELECTRONICS

PRODUCT INFORMATION

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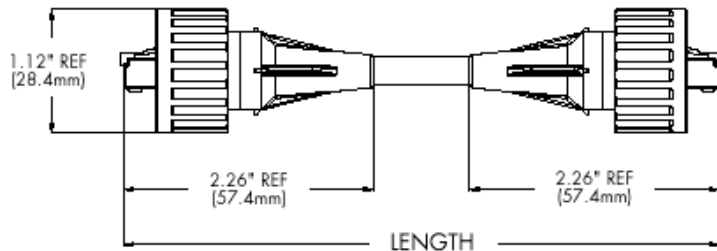ENS2115M050 .... Male Industrial to Male Industrial RJ45, 5 meter, 568A, 8 conductor

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.

1.12" REF [28.4mm]   2.26" REF [57.4mm]   2.26" REF [57.4mm]   LENGTH

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

O.D. CABLE RANGE .10"-.26" [2.5mm-6.5mm]
1.12" REF [28.4mm]
2.00" REF [50.8mm]
2.30" REF [58.4mm]