RJF RB

Ethernet Connection System for Harsh Environment – Industrial Ethernet

Description

RJ Field allows you to use an Ethernet Class D / Cat. 5e and Class E/Cat 6 connection for 10 BaseT,100 BaseTX or 1000 BaseT networks in harsh environments:

- Sealed against fluids and dusts (IP67)
- Shock, Vibration and Traction resistant
- No cabling operation in field and no tools required

With the patented RJStop® system you can use a standard RJ45 cordset in a protective composite plug which will protect it from shocks, dust and fluids.

No hazardous in-field cabling and grounding!





Electronica 2004: RJF Field awarded « Component Product of the Year »

RJFRB series is **ROHS** compliant

Transform your RJ45 cordset into a circular reverse bayonet IP67 Connector!

This RJF RB plug is connected into a receptacle, using a quick reverse bayonet coupling mechanism.

quick reverse bayonet coupling mechanism.

On the receptacle, one female RJ45 is soldered onto a PCB allowing for the following back terminations:

• another female RJ45

• a right angle female RJ45

• a RJ45 cordset

• a cat 6 IDC modules

- a cat 6 IDC modules
- a straight PCB termination

The RJ45 cordset shielding is transmitted to the RJ45 receptacle through lateral grounding fingers.

Amphenol Socapex Promenade de l'Arve – BP 29 – 74311 THYEZ - F Tel.: + 33 (0) 4 50 89 28 00 - Fax: + 33 (0) 4 50 96 29 75 http://www.rjfield.com

Applications

- Telecom Equipments
- Video Control
- Robotics
- Industrial Process Control
- CNC Machines
- Special Machines
- Motion Control
- Tele-maintenance

Amphenol ®



Main Characteristics

Data Transmission

• 10 BaseT, 100 BaseTX and 1000 BaseT networks Cat 5e per TIA/EIA 568B and ClassD per ISO/IEC 11801 or Cat6 per TIA/EIA 568B and ClassE per ISO/IEC 11801

Mechanical

- · Reverse bayonet coupling
- RJ45 cordset retention in the plug: 70 N in the axis
- Mating cycles : 500 min

Environmental Protection

· Sealing : IP67

• Salt Spray > 1000 h

• Fire Retardant / Low Smoke : UL94 V0 and NFF 16102, DIN 5510-2

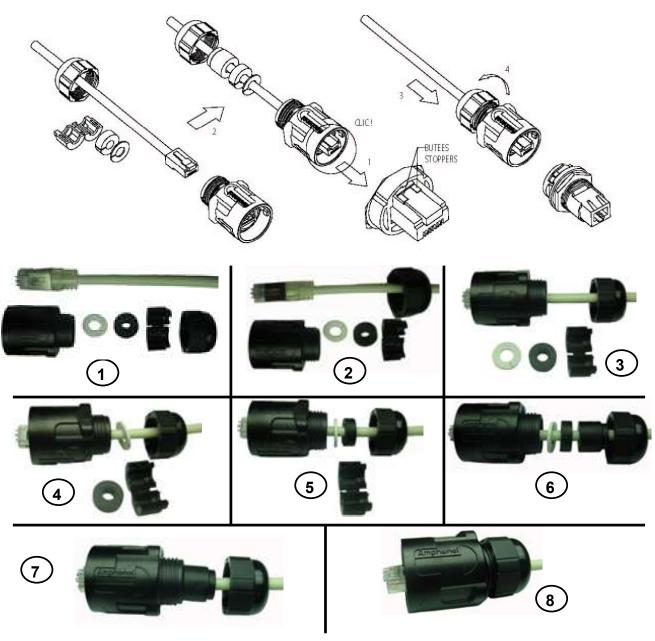
• Thermal Shock : 5 cycles at - 40°C / +100°C

• Operating Temperature : - 40°C / +85°C

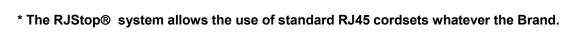
Assembly Instructions

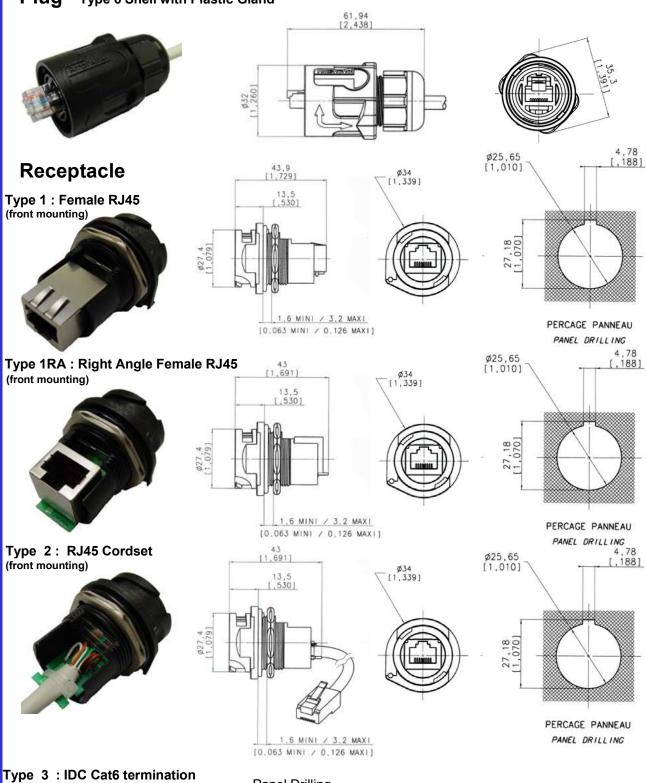
Universal: Can be used with all standard * RJ45 Cat.5e cordset brands

Easy and Safe : No field cabling tools required





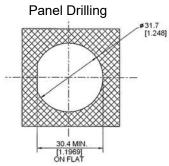






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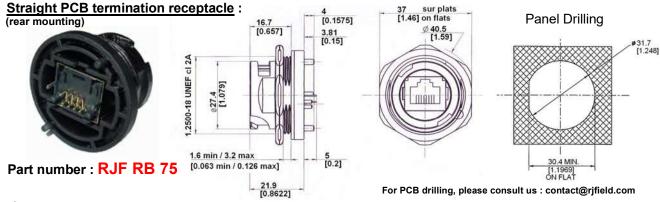
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Series **RJFRB** 1RA **RJF RB Shell Type** 6: Composite reverse bayonet Plug, Plastic Gland 7 : Composite jam nut Receptacle **Back Terminations (For Receptacles only)** 1: Female RJ45 1RA: Right angle female RJ45 2: RJ45 Cordset 3U: IDC cat6 - unshielded 3F: IDC cat6 - partial shielding 3S: IDC cat6 - 100% shielded Cordset Length (For Receptacles with "2" Back Termination only) 03:0.3 meters [11.81 inches] 05:0.5 meters [19.68 inches] 10:1 meter [39.37 inches] 15:1.5 meters [59.05 inches] Cabling Configuration (For "7" Receptacles only) 100BTX: 10/100 Base TX (568B)

Examples:

568A

- Plug: RJF RB 6
- Receptacle, female RJ45 Back termination: RJF RB 71
- Receptacle, right angle female RJ45 Back termination: RJF RB 71RA
- Receptacle, 1,5m [59.05"] RJ45 cordset termination: RJF RB 72 15 100BTX

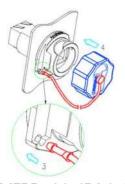


Important note:

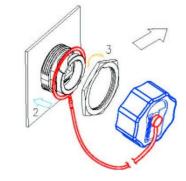
The customer PCB design will define the receptacle category.

Accessories

• IP67 Dust Caps



Cap for Receptacles RJFRB 71 / 71RA / 72xxx: **RJF RB C7**



Cap for Receptacles RJFRB 75 and RJFRB 73x:

RJF RB C75

Remark: not available for plug

We also offer Cat5e cordsets with a reinforced jacket to be used in harsh environments (shocks, oils, fuel,...) - double shielding - Please consult our website to download our dedicated datasheet.