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 »



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

This RJF RB plug is connected into a receptacle, using a **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 (will be available end april 2006)
- a straight PCB termination (will be available end Q1 2006)



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

Applications

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

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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

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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

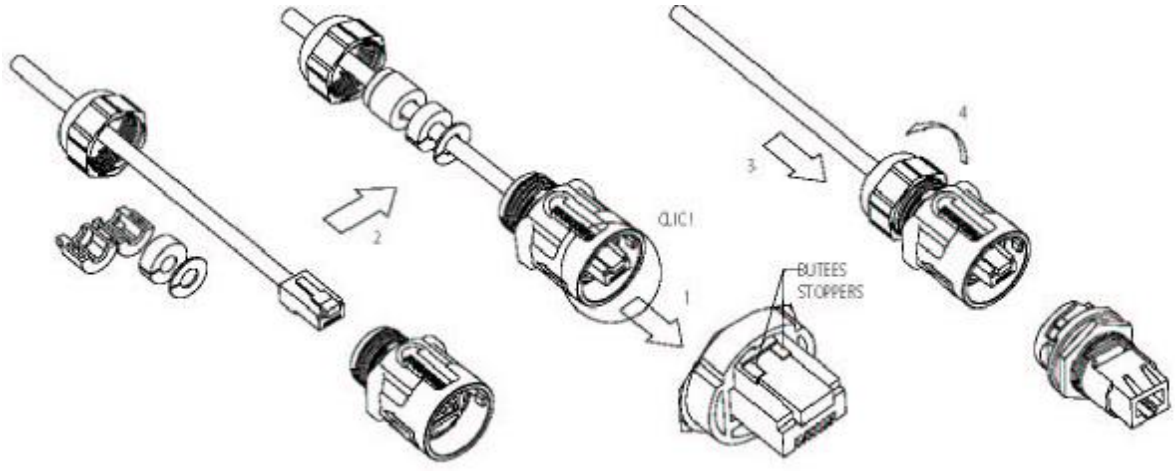
Environmental Protection

- 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 : <u>No field cabling tools required</u>





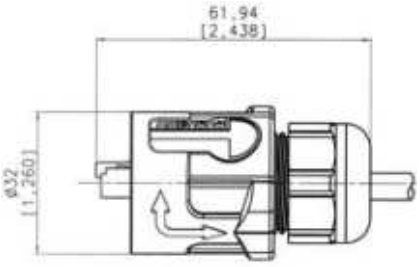
*** The RJStop® system allows the use of standard RJ45 cordsets whatever the Brand.**

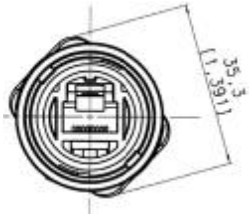
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Plug Type 6 Shell with Plastic Gland



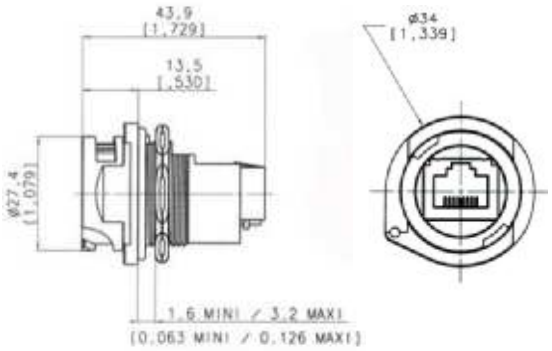


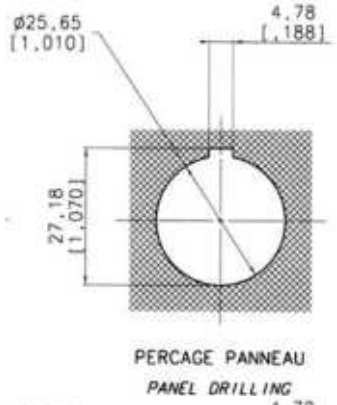


Receptacle

Type 1 : Female RJ45

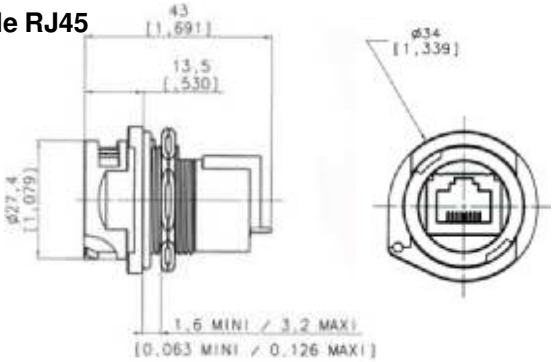


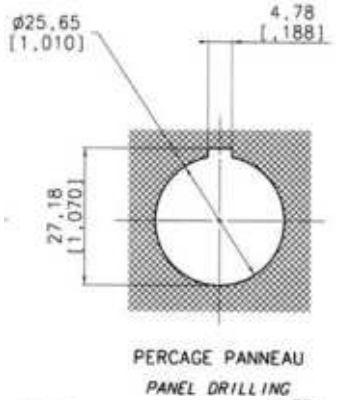




Type 1RA : Right Angle Female RJ45

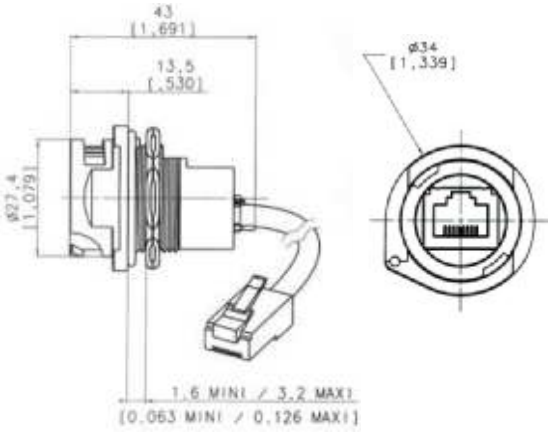


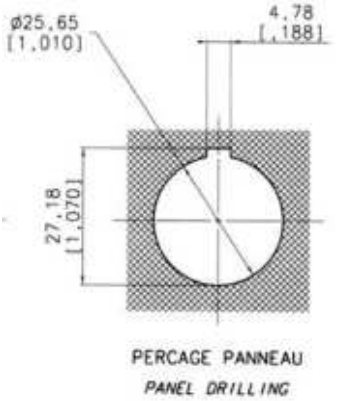




Type 2 : RJ45 Cordset







Type 3 : IDC Cat6 termination (<u>will be available april 2006</u>)



Product dimensions
to come soon





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Part Number Code

HOW TO ORDER

Series RJF RB	RJF RB	7	1RA	03	100 BTX

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 (available Q2 2006)
3F : IDC cat6 - partial shielding (available Q2 2006)
3S : IDC cat6 - 100% shielded (available Q2 2006)

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)
568A

Examples :
- **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**

Other receptacle type :



Product dimensions to come soon

Straight PCB termination :
Part number : RJF RB 75

Important note:
The customer PCB design will define the receptacle category.

Remark : **This receptacle type will be available end of Q1 2006**

Accessories

- **IP67 Dust Caps**

Cap picture not available.

To come soon

Product dimensions to come soon



Cap for Receptacles :
RJF RB C7

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.

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