# **RJ Field**

# **Ethernet Connection System for Harsh Environment**



## **Description**

RJField allows you to use an Ethernet Cat.5e connection for 10 BaseT or 100 BaseTX networks in harsh environments:

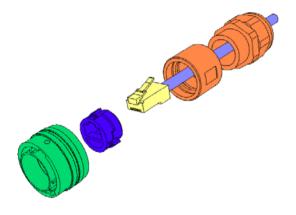
- Sealed against fluid and dust (IP67)
- Shock, Vibration and Traction resistant
- No cabling operation in field and no tools required
- Mechanical Coding / Polarization (4 positions)

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

No hazardous in-field cabling and grounding!



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Transform your RJ45 cordset in a Harsh Environment Connector

This metallic plug is connected into a receptacle, using a fast ¼ turn bayonet coupling mechanism (MIL-C-26482 type) providing both "audible and visual" coupling.

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

- another female RJ45
- a RJ45 cordset
- IDC modules

# **Applications**

- Robotics
- Industrial Process Control
- CNC Machines
- Machine Tool
- Motion Control
- Data Acquisition and Transmission in Harsh Environment
- Tele-maintenance

## **Main Characteristics:**

#### **Data Transmission**

· Category 5e per ISO/IEC 11801

#### Mechanical

- · Bayonet coupling ( "Audible & Visual" coupling signal )
- 4 mechanical Coding / Polarization possibilities by the user (insert rotation)
- RJ45 cordset retention in the plug: 100 N in the axis
- · Mating cycles: 500 min

#### **Environmental Protection**

· Sealing: IP67

Salt Spray: 48 h with Nickel plating

> 96 h with black coating

> 500 h with hard anodic coating and Cadmium

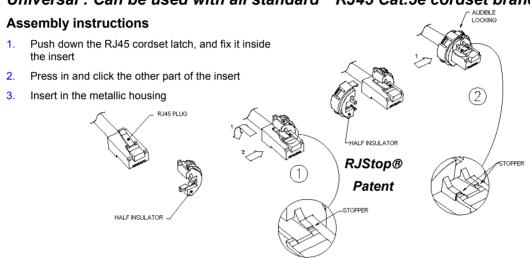
• Fire / Low Smoke : UL94 V0 and NF F 16 101 & 16 102

• Vibrations: 25 – 250 Hz, 5 g, 3 axes: no discontinuity > 1μs

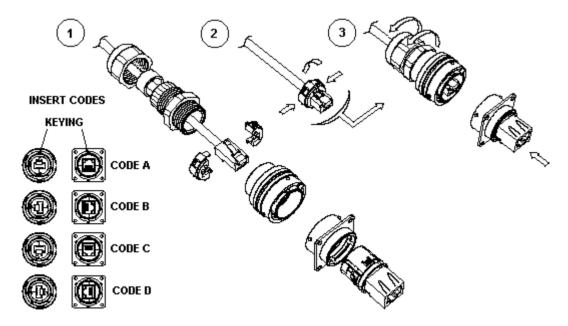
· Humidity: 21 days, 43°C, 98% humidity

• Rapid change of Temperature : 5 -20°C / +85°C cycles

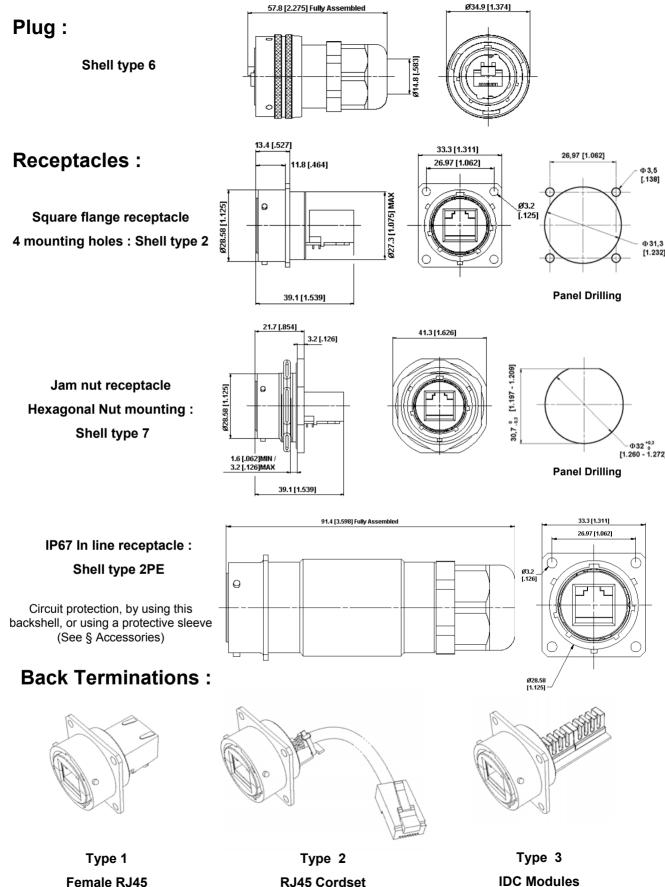
#### Universal: Can be used with all standard \* RJ45 Cat.5e cordset brands



### Easy and Safe : No field cabling tools required



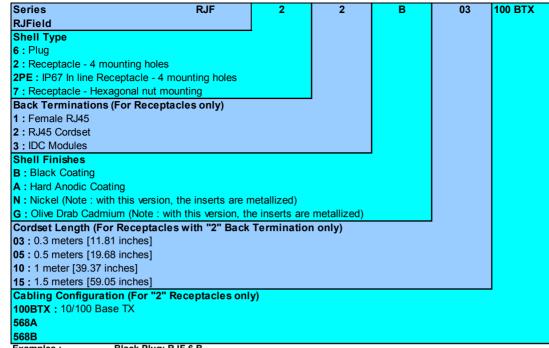
<sup>\*</sup> The RJStop® system allows the use of standard RJ45 cordsets regardless their Brand. However, Amphenol Socapex can provide Cat5e cordset with reinforced jacket to be used in harsh environments (shocks, oils, fuel,...). Please consult factory.



**RJ45 Cordset** 

**IDC Modules** 

## **Part Number Code**

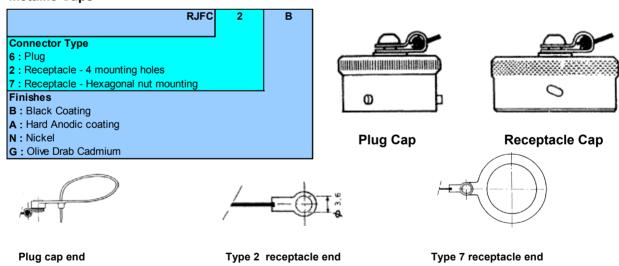


- Examples: Black Plug: RJF 6 B
  - Black receptacle, 4 mounting holes, Female RJ45 Back termination: RJF 2 1 B
  - Black receptacle, Hexagonal nut mounting, 1.5m [59.05"] 100 BTX cordset termination: RJF 7 2 B 15 100BTX Black in line receptacle, 4 mounting holes, 30cm [11.81"] 568B cordset termination: RJF 2PE 2 B 03 568B

#### **Accessories**

**HOW TO ORDER** 

Metallic Caps



- Panel Gasket for type 2 Receptacle (Thickness: 0.6mm [.024]): Part No. JE 18
- Circuit protection sleeve (Neoprene) type SL61: Part No. 43456



• Cat5e cordsets with reinforced jacket to be used in harsh environments (shocks, oils, fuel,...). Please consult factory.