

# RJ Field

## Ethernet Connection System for Harsh Environment



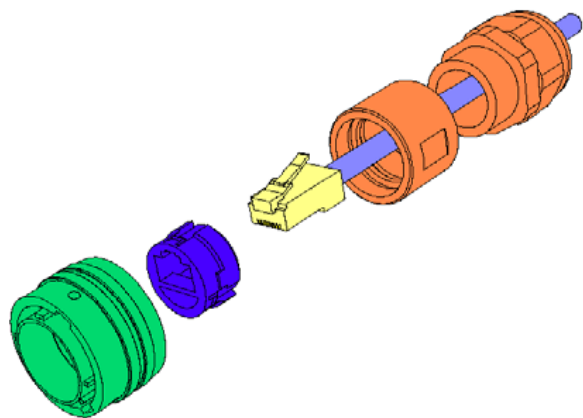
### Description

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!



Transform your RJ45 cordset in a Harsh Environment Connector !

This metallic plug is connected into a receptacle, using a fast  $\frac{1}{4}$  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

#### Technical Assistance :

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### 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

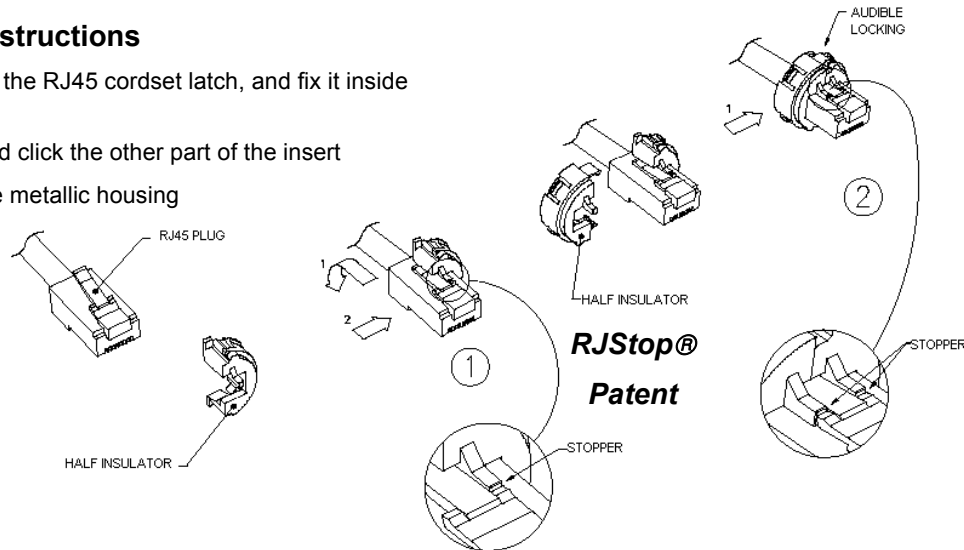
## Environmental Protection

- 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

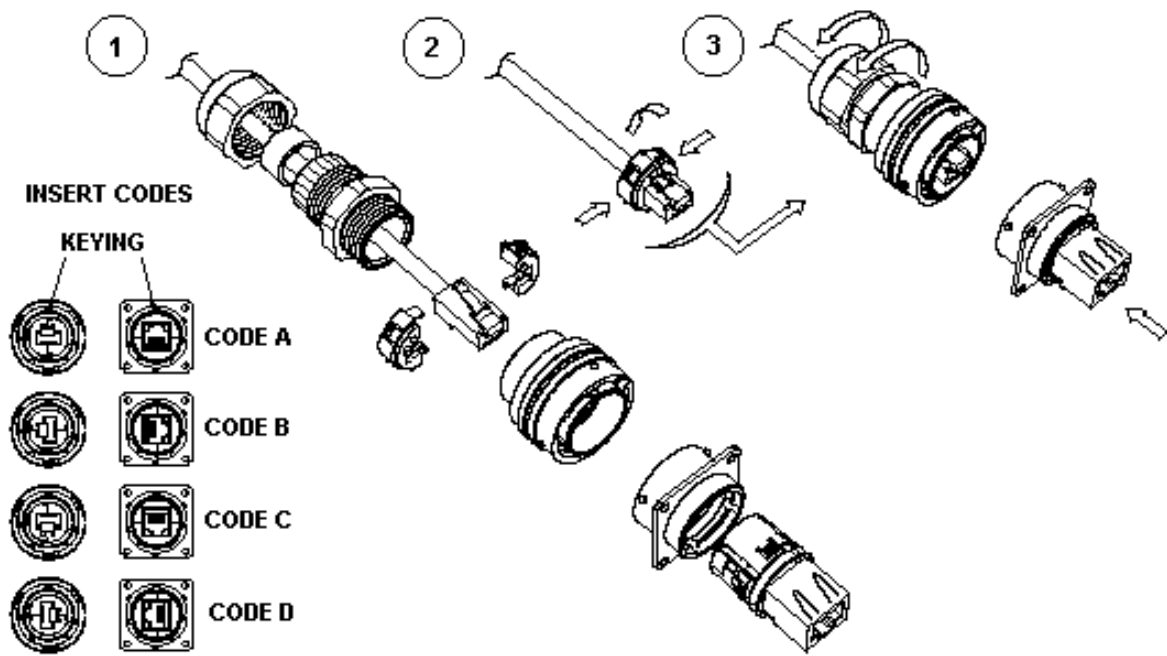
**Universal : Can be used with all standard \* RJ45 Cat.5e cordset brands**

## Assembly instructions

1. Push down the RJ45 cordset latch, and fix it inside the insert
2. Press in and click the other part of the insert
3. Insert in the metallic housing



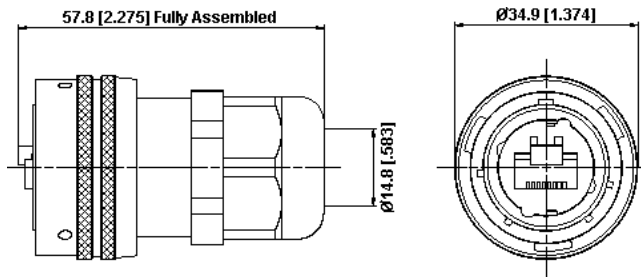
**Easy and Safe : No field cabling tools required**



\* 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.

## Plug :

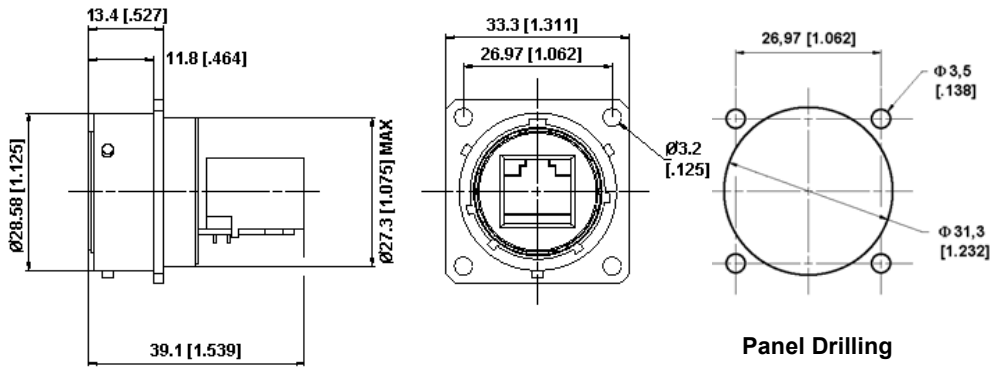
Shell type 6



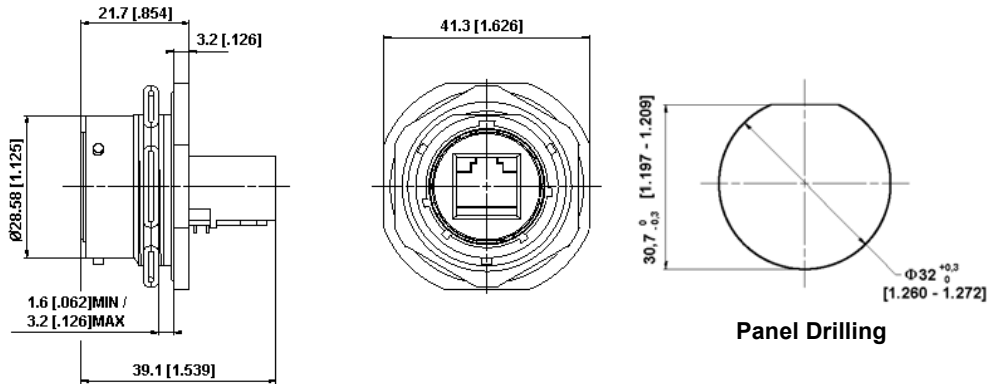
## Receptacles :

Square flange receptacle

4 mounting holes : Shell type 2



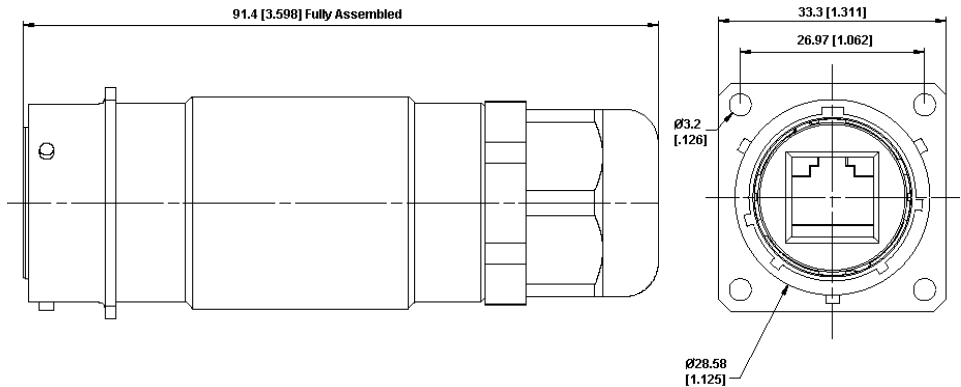
Jam nut receptacle  
Hexagonal Nut mounting :  
Shell type 7



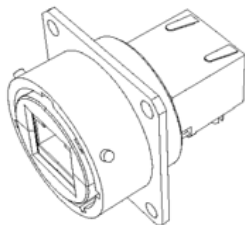
IP67 In line receptacle :

Shell type 2PE

Circuit protection, by using this backshell, or using a protective sleeve (See § Accessories)

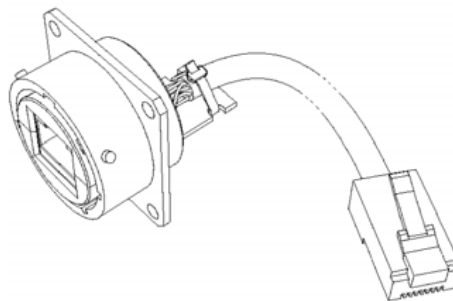


## Back Terminations :



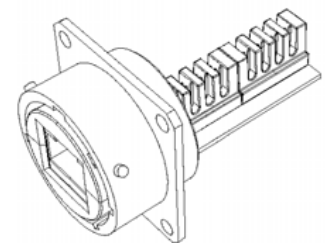
Type 1

Female RJ45



Type 2

RJ45 Cordset



Type 3

IDC Modules

# Part Number Code

HOW TO ORDER

Series	RJF	2	2	B	03	100 BTX
RJField						
<b>Shell Type</b>						
6 : Plug						
2 : Receptacle - 4 mounting holes						
2PE : IP67 In line Receptacle - 4 mounting holes						
7 : Receptacle - Hexagonal nut mounting						
<b>Back Terminations (For Receptacles only)</b>						
1 : Female RJ45						
2 : RJ45 Cordset						
3 : IDC Modules						
<b>Shell Finishes</b>						
B : Black Coating						
A : Hard Anodic Coating						
N : Nickel (Note : with this version, the inserts are metallized)						
G : Olive Drab Cadmium (Note : with this version, the inserts are metallized)						
<b>Cordset Length (For Receptacles with "2" Back Termination only)</b>						
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]						
<b>Cabling Configuration (For "2" Receptacles only)</b>						
100BTX : 10/100 Base TX						
568A						
568B						

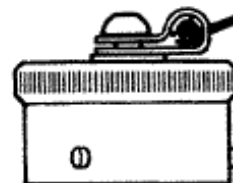
Examples :

- 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

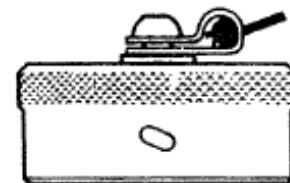
## Accessories

### • Metallic Caps

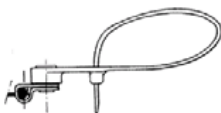
	RJFC	2	B
<b>Connector Type</b>			
6 : Plug			
2 : Receptacle - 4 mounting holes			
7 : Receptacle - Hexagonal nut mounting			
<b>Finishes</b>			
B : Black Coating			
A : Hard Anodic coating			
N : Nickel			
G : Olive Drab Cadmium			



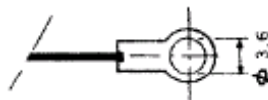
Plug Cap



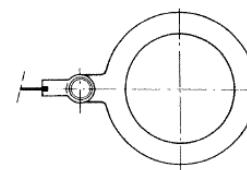
Receptacle Cap



Plug cap end



Type 2 receptacle end



Type 7 receptacle end

- 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.