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.

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Applications

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

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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
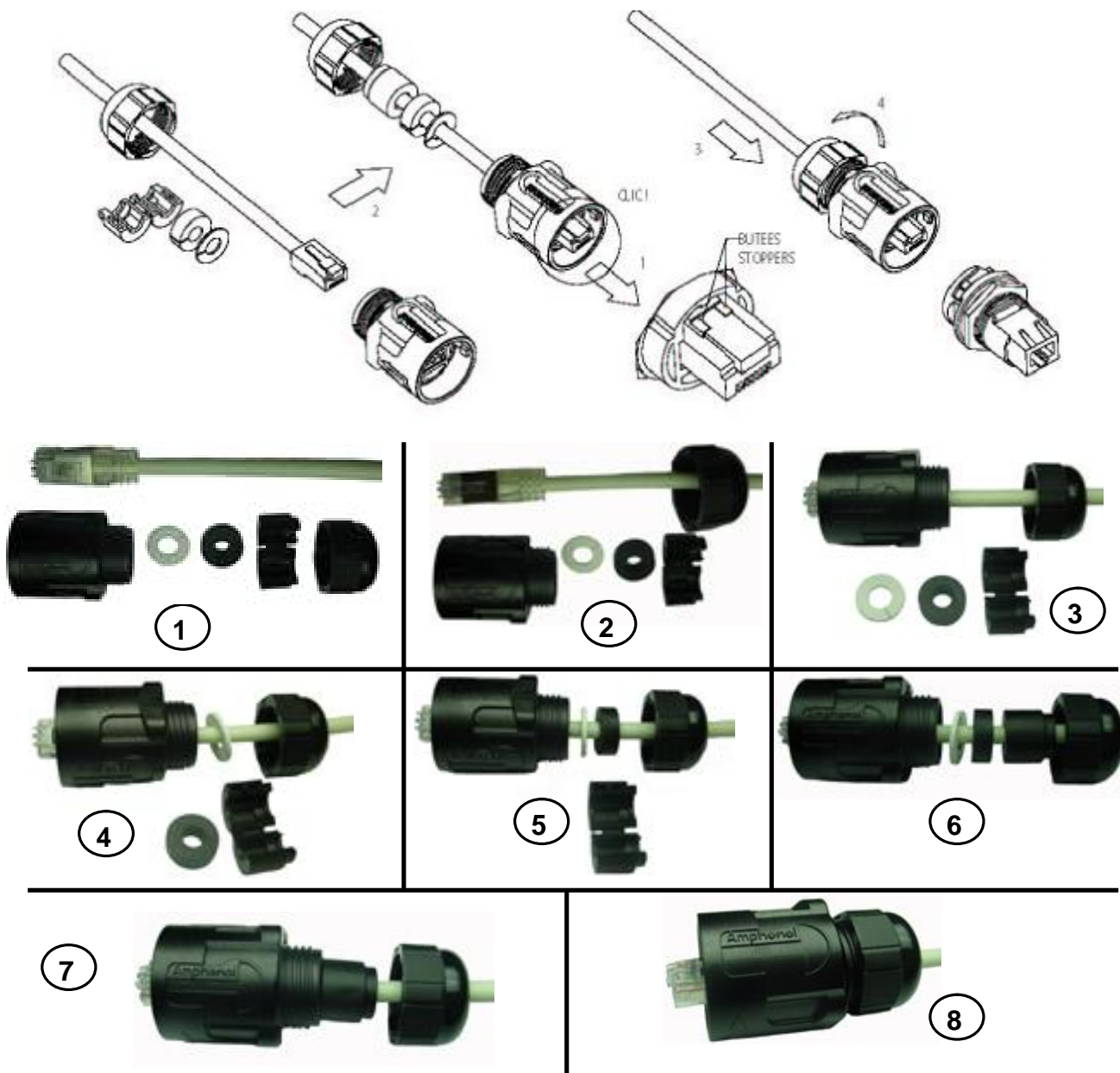
• Mating cycles : 500 min

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

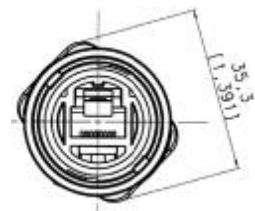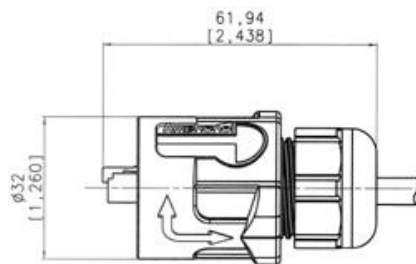• Operating Temperature : - 40°C / +85°C

Assembly Instructions

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

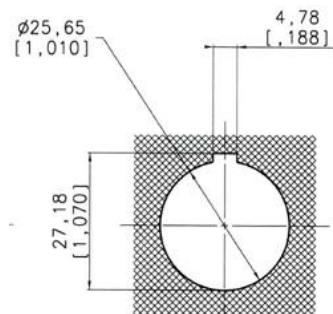### *Easy and Safe : <u>No field cabling tools required</u>*

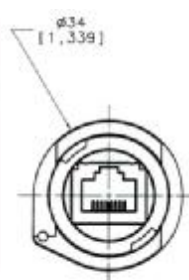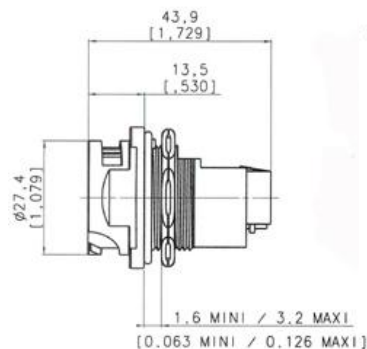*** The RJStopâ system allows the use of standard RJ45 cordsets whatever the Brand.**

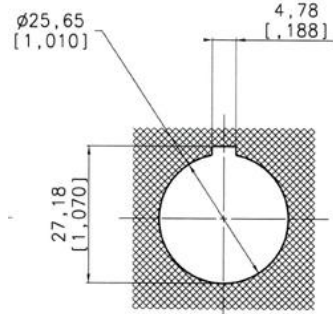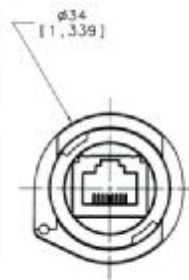**Amphenol** ®

Plug   Type 6 Shell with Plastic Gland

61,94
[2,438]

Ø32
[1,260]

35,3
[1,391]

Receptacle

Type 1 : Female RJ45

43,9
[1,729]

13,5
[,530]

Ø27,4
[1,079]

Ø34
[1,339]

1.6 MINI / 3.2 MAXI
[0.063 MINI / 0.126 MAXI]

Ø25,65
[1,010]

4,78
[,188]

27,18
[1,070]

PERCAGE PANNEAU
PANEL DRILLING

Type 1RA : Right Angle Female RJ45

43
[1,691]

13,5
[,530]

Ø27,4
[1,079]

Ø34
[1,339]

1.6 MINI / 3.2 MAXI
[0.063 MINI / 0.126 MAXI]

Ø25,65
[1,010]

4,78
[,188]

27,18
[1,070]
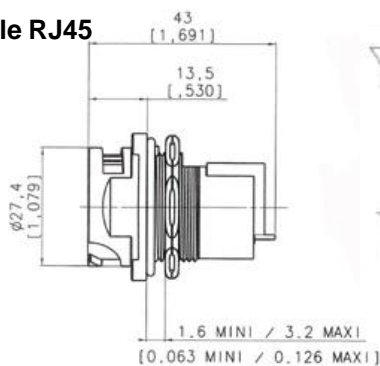
PERCAGE PANNEAU
PANEL DRILLING

Type 2 : RJ45 Cordset

43
[1,691]

13,5
[,530]

Ø27,4
[1,079]

Ø34
[1,339]

1.6 MINI / 3.2 MAXI
[0.063 MINI / 0.126 MAXI]

Ø25,65
[1,010]

4,78
[,188]

27,18
[1,070]
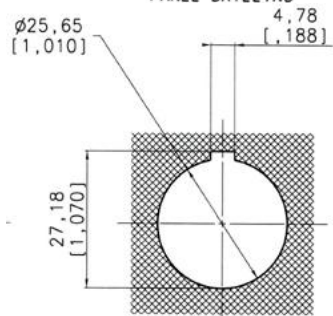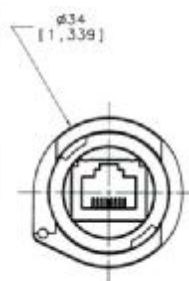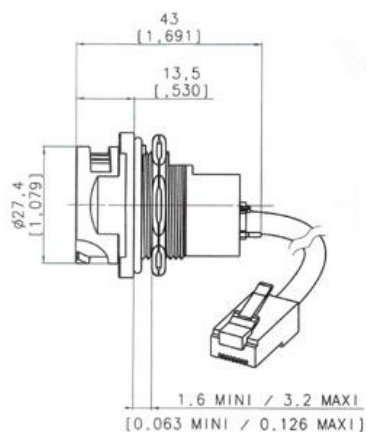
PERCAGE PANNEAU
PANEL DRILLING

Type 3 : IDC Cat6 termination (will be available april 2006)

Product dimensions
to come soon

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Part Number Code

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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