Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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.

DOC-000063-ANG-A Dec 2005

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
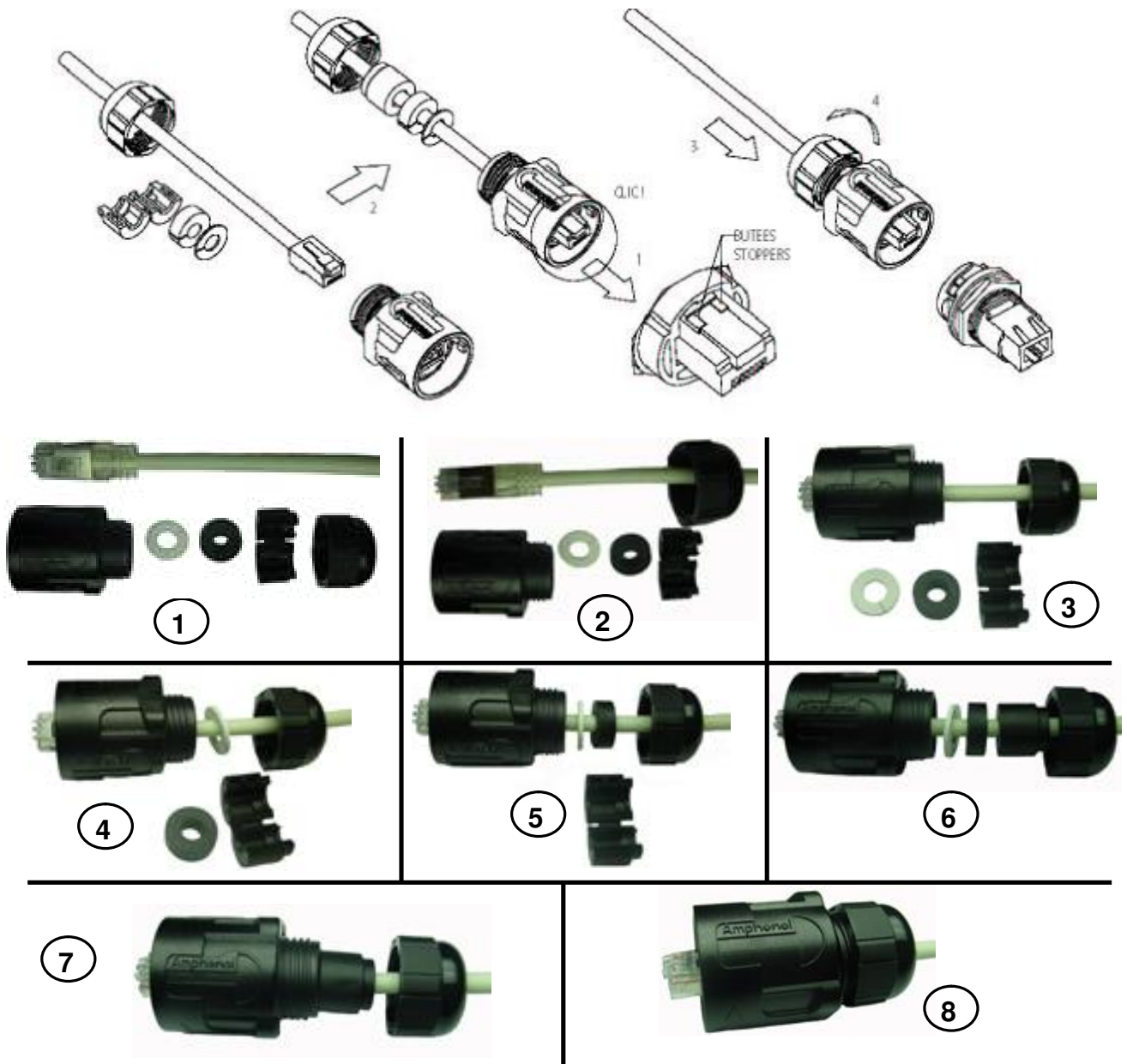
• Mating cycles : 500 min

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

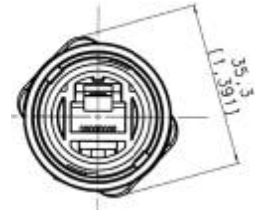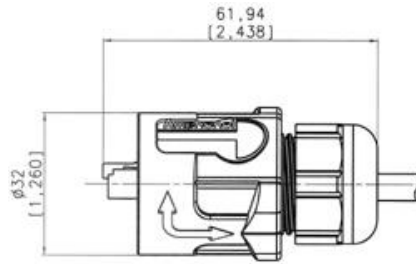### *Universal : Can be used with all standard * RJ45 Cat.5e cordset brands*

Easy and Safe : No field cabling tools required

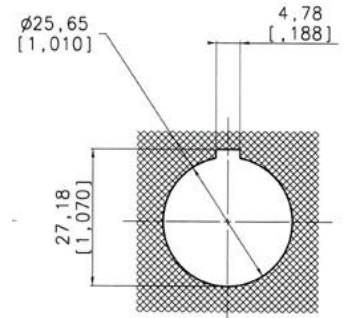*** The RJStop® system allows the use of standard RJ45 cordsets whatever the Brand.**

Amphenol ®
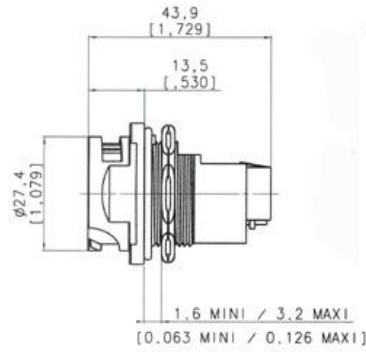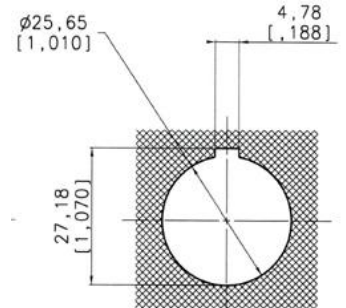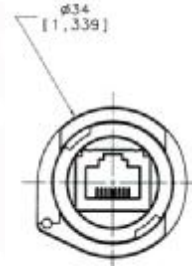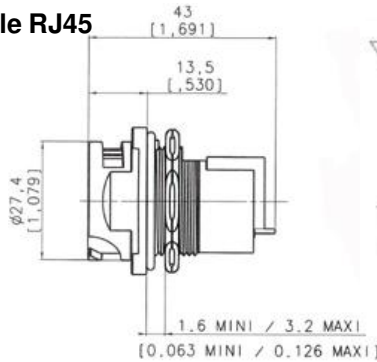
Plug   Type 6 Shell with Plastic Gland

61,94
[2,438]

Ø32
[1,260]

35,3
[1,391]

Receptacle

Type 1 : Female RJ45

43,9
[1,729]

13,5
[,530]

Ø34
[1,339]

Ø27,4
[1,079]

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]

Ø34
[1,339]

Ø27,4
[1,079]

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]

Ø34
[1,339]

Ø27,4
[1,079]

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

Ø25,65
[1,010]

4,78
[,188]

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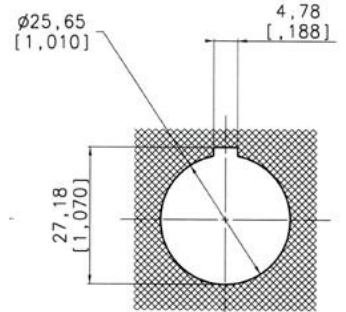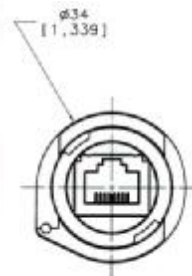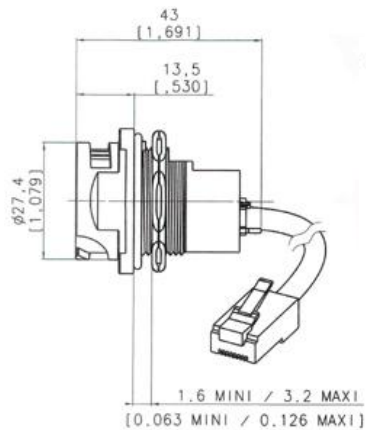
PERCAGE PANNEAU
PANEL DRILLING

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 :

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**

Product dimensions
to come soon

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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