Rugged Digital Networks Solutions
Reinforced Infocom Connectors for Harsh Environment
RJ Field Cat6

www.amphenol-socapex.com
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quick selection guide</td>
<td>3</td>
</tr>
<tr>
<td>Markets &amp; applications</td>
<td>4</td>
</tr>
<tr>
<td>Information</td>
<td>5</td>
</tr>
<tr>
<td>About Amphenol Socapex</td>
<td>6</td>
</tr>
</tbody>
</table>

## CAT 6 Rugged Ethernet Solutions

<table>
<thead>
<tr>
<th>Product</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>RJFRB</td>
<td>10</td>
</tr>
<tr>
<td>RJF546</td>
<td>12</td>
</tr>
<tr>
<td>RJF6</td>
<td>14</td>
</tr>
<tr>
<td>RJF6</td>
<td>17</td>
</tr>
<tr>
<td>RJF6</td>
<td>18</td>
</tr>
<tr>
<td>RJF6</td>
<td>19</td>
</tr>
<tr>
<td>RJF6</td>
<td>20</td>
</tr>
<tr>
<td>RJF6</td>
<td>21</td>
</tr>
<tr>
<td>RJF6</td>
<td>22</td>
</tr>
<tr>
<td>RJF6</td>
<td>23</td>
</tr>
<tr>
<td>RJF6</td>
<td>26</td>
</tr>
<tr>
<td>RJF6</td>
<td>27</td>
</tr>
<tr>
<td>RJF6</td>
<td>28</td>
</tr>
<tr>
<td>RJF6</td>
<td>29</td>
</tr>
<tr>
<td>RJF6</td>
<td>30</td>
</tr>
<tr>
<td>RJF6</td>
<td>31</td>
</tr>
<tr>
<td>CAT6 Cable</td>
<td>32</td>
</tr>
</tbody>
</table>

## ATEX Solutions

<table>
<thead>
<tr>
<th>Product</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>RJF TVX6</td>
<td>33</td>
</tr>
</tbody>
</table>

Due to technical progress, all information provided is subject to change without prior notice
Designed by Amphenol Socapex
## QUICK SELECTION GUIDE

<table>
<thead>
<tr>
<th>CONNECTORS</th>
<th>SERIES</th>
<th>COUPLING MECHANISM</th>
<th>SHAPE</th>
<th>MATERIAL</th>
<th>SPECIFICATION</th>
<th>PRIME MARKET</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>RJFRB</td>
<td></td>
<td>Reverse bayonet</td>
<td>Circular</td>
<td>Plastic</td>
<td>N/A</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>RJK5446</td>
<td></td>
<td>Push pull</td>
<td>Circular</td>
<td>Plastic</td>
<td>N/A</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>RJF6</td>
<td></td>
<td>Bayonet</td>
<td>Circular</td>
<td>Metal</td>
<td>MIL-DTL-26482</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>RJF6 CAT6 IN LINE RECEPTACLE</td>
<td></td>
<td>Bayonet</td>
<td>Circular</td>
<td>Metal</td>
<td>MIL-DTL-26482</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>RJF6 CAT6 TRANSVERSALLY SEALED RECEPTACLES</td>
<td></td>
<td>Bayonet</td>
<td>Circular</td>
<td>Metal</td>
<td>MIL-DTL-26482</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>RJF6 CAT6 HERMETIC RECEPTACLES</td>
<td></td>
<td>Bayonet</td>
<td>Circular</td>
<td>Metal</td>
<td>MIL-DTL-26482</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>RJ Field CAT 6 RECEPTECLES WITH SELF CLOSING CAP</td>
<td></td>
<td>Bayonet</td>
<td>Circular</td>
<td>Metal</td>
<td>MIL-DTL-26482</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>RJF TV6</td>
<td></td>
<td>Thread</td>
<td>Circular</td>
<td>Metal</td>
<td>MIL-DTL-38999 Series III</td>
<td></td>
<td>23</td>
</tr>
<tr>
<td>RJF TV6 CAT6 THROUGH BULKHEAD RECEPTACLES</td>
<td></td>
<td>Thread</td>
<td>Circular</td>
<td>Metal</td>
<td>MIL-DTL-38999 Series III</td>
<td></td>
<td>26</td>
</tr>
<tr>
<td>RJF TV 6 CAT6 TRANSVERSALLY SEALED RECEPTACLES</td>
<td></td>
<td>Thread</td>
<td>Circular</td>
<td>Metal</td>
<td>MIL-DTL-38999 Series III</td>
<td></td>
<td>27</td>
</tr>
<tr>
<td>RJF TV 6 CAT6 HERMETIC RECEPTACLES</td>
<td></td>
<td>Thread</td>
<td>Circular</td>
<td>Metal</td>
<td>MIL-DTL-38999 Series III</td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>HIGH RELIABILITY CAT6 CABLE &amp; CORDETS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MIL-DTL-38999 Series III</td>
<td></td>
<td>32</td>
</tr>
<tr>
<td>RJFTVX6</td>
<td></td>
<td>Thread</td>
<td>Circular</td>
<td>Metal</td>
<td>MIL-DTL-38999 Series III</td>
<td></td>
<td>33</td>
</tr>
</tbody>
</table>
MARKETS AND APPLICATIONS

Commercial Aerospace
- Fadec/Engine control
- Landing gear
- Braking system
- Display unit - Power unit
- Actuator - Flight control system

Military Aerospace
- Countermeasure
- Power unit - Radar
- Display unit - Flight control system
- POD - Braking system
- FADEC/Engine control

Industrial & telecom
- Railway
- Nuclear

Rail Mass Transit

Oil & Gas
INFORMATION

<table>
<thead>
<tr>
<th></th>
<th>CAT5E</th>
<th>CAT6</th>
<th>CAT6A</th>
</tr>
</thead>
<tbody>
<tr>
<td>STANDARD</td>
<td>ISO 11801 EIA/TIA 568</td>
<td>ISO 11801 EIA/TIA 568</td>
<td>ISO 11801 EIA/TIA 568</td>
</tr>
<tr>
<td>DATA RATE</td>
<td>1 GBit/s</td>
<td>1 GBit/s</td>
<td>10 GBit/s</td>
</tr>
<tr>
<td>FREQUENCY</td>
<td>100 MHz</td>
<td>250 MHz</td>
<td>500 MHz</td>
</tr>
</tbody>
</table>

OUR SOLUTIONS

<table>
<thead>
<tr>
<th>SERIES</th>
<th>CAT5E</th>
<th>CAT6</th>
<th>CAT6A</th>
</tr>
</thead>
<tbody>
<tr>
<td>RJFRB</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>RJF544</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RJF5446</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>RJF / RJFTV</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RJF6 / RJFTV6</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>RJFTV ATEX</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RJFTV6 ATEX</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>µCOM-10Gb+</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>RJF6A / RJFTV6A</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>HIGH RELIABILITY CABLES &amp; CORDSETS</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

* Coming soon

MORE INFO?
Cat5e solutions: read our catalog «Rugged Digital Networks solutions (RJ-USB Field)» DOC-000075-ANG
µCom-10Gb+ Ethernet Micro Connector: read our brochure µCom-10GB+ DOC-000015-ANG
Or visit our website: www.amphenol-socapex.com
Amphenol Socapex | Rugged Digital Networks Solutions (RJ Field Cat6)

ABOUT AMPHENOL SOCAPEX

Proven excellence in interconnect solutions

Since 1947, Amphenol Socapex has prescribed, designed and manufactured reliable and innovative interconnection solutions for harsh environments, specializing in standard and customized electrical and fiber optic connectors, contacts, accessories and cabling solutions.

Located in the Mont Blanc region of France and Pune in India, Amphenol Socapex has a presence in over 100 countries around the world.

Amphenol Socapex is part of the international Amphenol Corporation.

OUR HISTORY

1947
- Socapex creation in Suresnes, France
- 1st radio connector

1956-57
- Manufacturing unit in Cluses (74), France
- Thomson-CSF becomes primary shareholder

Early 1960's
- Séries 127/HE8
- Séries PT/451
- SL Series launch

1973
- 1st board level connectors: HE8
- 1st “licence Bendix” manufactured connectors
- New factory 13 000 m² in Thyez (74) France with 250 people

1975
- Production of 38999 connectors

1000+ employees

Net Sales 2019: 86,6 M€
69% Export - 31% France

Two facilities:
Thyez (France), Pune (India)

2014-2017
- New Cable Assembly workshop
- New Contact Manufacturing workshop

Today and tomorrow | New technologies

Miniaturization
- High-speed signals
- Rugged Ethernet
- Power

Miniaturization
- ROHS solutions
- Power

Fiber optics
- Rugged Ethernet
- Power

Advanced Materials (composite)
- ROHS solutions
- Power

Quadrax Contacts
Cable Assembly
Our expertise has no boundaries

Integrated Production in France & India
- 24 000 m² manufacturing capacity on 2 sites
- Design centers in France and India
- State-of-the-art manufacturing technology

Our markets

Military
Communication Systems - Radios - C4ISR / Ground vehicles - Vetrinos / Marine / Missiles

Aviation
Commercial & military / Avionics / Engines / Landing gear / Actuators

1986
Amphenol Socapex
- Amphenol becomes primary shareholder

1995-96
- Expanded Beam connector CTOS launch
- Headquarters transferred to Thyez

2004
- RJ Field launch, “Award Electronica”

2005
- Opening of manufacturing site in Pune, India

2010’s
- LuxBeam™ and HDAS launch

Today and tomorrow | Sustainable development

- Respect for nature and the environment
- Optimization of natural resources
- Goodwill
- Recycling
- Waste Management
PRODUCING FASTER, SMALLER, STRONGER CONNECTORS...

Technologies & innovation

**Technological Center**  
Engineering Laboratory for product testing and qualification, product expertise and metrology  
- Mechanical and electrical skills  
- RF and fiber optics expertise

**High-Speed Expertise**  
Strong expertise in high-speed signals  
- 3D EM simulation software & EM models  
- Time Domain and frequency domain (VNA 20GHz, TDR and eye diagram)

**Materials Expertise**  
Focus on materials expertise and manufacturing techniques to produce faster, smaller and stronger products  
- 3D CAD mechanical software, simulation & analysis  
- Disruptive metal alloys, additive manufacturing

**Eco-responsibility**  
Sustainable environment approach, with pro-active management of regulations (REACH / RoHS / Conflict minerals…)  
- New materials development, plating, and suitable processes  
- Recycling and rational resources consumption

Our workshops

Our workshops located in France & India provide consistent quality adapted to your volume requirements.

**Tooling** : Tools for our different activities : molding, machining, assembly  
**Molding** : Solid expertise in thermoplastic elastomer and thermoset molding  
**Machining** : Manufacturing of cylindrical shells from 10 to 90 mm in diameter and rectangular shells  
**Screw Machining** : Cylindrical production parts up to 10 mm in diameter  
**Plating** : Plating with cadmium, nickel, electroless nickel, silver, black zinc nickel, gold  
**Assembly** : Connector and harness assembly (electrical & optical)

Our certifications

Our memberships

Product certifications : MIL-DTL38999, EN3645, EN3155, VG  
Member of CMG (Connecting Manufacturing Group) Consortium
We have a strong reputation for helping customers solve their toughest challenges. This approach of serving your needs is ingrained in our company – from our sales team to our product development engineers.

**A partner you can trust**

<table>
<thead>
<tr>
<th>Customer Proximity</th>
<th>Design Expertise</th>
<th>Quality Commitment</th>
<th>On Time Delivery Performance</th>
<th>Compliance manager</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Customer Proximity" /></td>
<td><img src="image2" alt="Design Expertise" /></td>
<td><img src="image3" alt="Quality Commitment" /></td>
<td><img src="image4" alt="On Time Delivery Performance" /></td>
<td><img src="image5" alt="Compliance manager" /></td>
</tr>
</tbody>
</table>

**Buy our solutions**

You can access our solutions through our global network of sales offices or through our distributors.

**Field Sales Team :**
- 12 in France
- 15 in Europe
- 100+ in North America and rest of the world.
- 5 Business Development Managers supporting local sales force
  - Europe, North America and the rest of the world

**Technical Support & Multilingual Customer Service :**
- 15 people

**Worldwide Distribution Network :**
Including qualified distributors (QPL approved) for assembling: MIL-DTL-38999, PT/451/VG95328 & Fiber Optics connectors
CAT6 Ethernet connection system for harsh environment – Industrial Ethernet

- RJF RB allows you to use an Ethernet Class E / Cat 6 connection for 10 BaseT, 100 BaseTX or 1000 BaseT up to 250 MHz networks in harsh environments.
- 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 on-field cabling and grounding!

Main features

Applications
- Telecom equipments
- Video control
- Robotics
- Industrial process control
- CNC machines
- Special machines
- Motion control

Main characteristics
- Sealed against fluids and dust (IP68)
- Shock, vibration and traction resistant
- No cabling operation in field, no tools required
- Reverse bayonet coupling
- RJ45 cordset retention in the plug: 70 N in the axis
- Mating cycles: 500 min
- Compatible with cable diameter from 5.5 mm [0.216 in] to 7 mm [0.275 in]

Data transmission
- 10 BaseT, 100 BaseTX and 1000 BaseT up to 250 MHz networks
- Cat6 per EIA/TIA 568 and ClassE per ISO11801

Environmental protection
- Sealing: IP68
- Salt spray > 1000 h
- Fire retardant / Low smoke: UL94 V0 and NFF 16102, DIN 5510-2
- Operating temperature: -40°C / +85°C

How to order

Part number code: receptacle

<table>
<thead>
<tr>
<th>Shell type</th>
<th>RJF RB</th>
<th>7</th>
<th>3U</th>
</tr>
</thead>
<tbody>
<tr>
<td>7: composite jam nut receptacle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Back terminations (for receptacles only)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3U: IDC cat6 - unshielded</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3F: IDC cat6 - partial shielding</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3S: IDC cat6 - 100% shielded</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Examples: - receptacle, IDC cat6, unshielded: RJF RB 73U

Part number code: plug

<table>
<thead>
<tr>
<th>Shell type</th>
<th>RJF RB</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>6: composite reverse bayonet plug, plastic gland</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Examples: - plug: RJF RB 6

Receptacle

Type 3: IDC CAT 6 termination (rear mounting)

Unshielded: RJF RB 73U
Partial shielding RJF RB 73F
Panel Drilling
Shielded: RJF RB 73S

- RJF RB allows you to use an Ethernet Class E / Cat 6 connection for 10 BaseT, 100 BaseTX or 1000 BaseT up to 250 MHz networks in harsh environments.
- 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 on-field cabling and grounding!
**Plug**

Type 6 shell with plastic gland

![Image of RJF RB Plug](image)

**Assembly instructions**

1. [Image of assembly step 1]
2. [Image of assembly step 2]
3. [Image of assembly step 3]
4. [Image of assembly step 4]
5. [Image of assembly step 5]
6. [Image of assembly step 6]
7. [Image of assembly step 7]
8. [Image of assembly step 8]

**Accessories**

IP68 Dust caps

![Image of IP68 Dust caps](image)

RJF RB C75
Cap for receptacles RJFRB75 and RJFRB73x
- RJF5446 allows you to use an Ethernet Class E / Cat 6 connection for 10 BaseT, 100 Base TX or 1000 BaseT up to 250 MHz networks in harsh environments.
- 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 on-field cabling and grounding!

Main features

Applications
- Telecom equipment
- Video control
- Robotics
- Industrial process control
- CNC machines
- Special machines
- Motion control
- Tele-maintenance

Main characteristics
- Compliant with IEC 60603-7 variante 12
- Shock, vibration and traction resistant
- No cabling operation in field and no tools required
- Sealed against fluids and dust (IP68)
- Quick push pull coupling
- RJ45 cordset retention in the plug: 100 N in the axis
- Mating cycles: 500 min
- Improved EMI Protection
- Compatible with cable diameter from 6 mm [0.236 in] to 13 mm [0.512 in]

Data transmission
- 10 BaseT, 100 BaseTX and 1000 BaseT up to 250 MHz networks
- Cat6 per EIA/TIA 568 and ClassE per ISO11801

Environmental Protection
- Sealing: IP68
- Salt spray > 1000 h
- Fire retardant / Low smoke: UL94 V0 and EN45545
- Vibrations: 10 – 500 Hz, 10 g, 3 axes: no discontinuity > 10 nano s.
- Operating temperature: - 40°C / +85°C

How to order

Part number code: receptacle

<table>
<thead>
<tr>
<th>Shell type</th>
<th>RJF 5446</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2: composite square flange receptacle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2S: composite square flange receptacle transversally sealed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2M: metallized (Ni) composite square flange receptacle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2SM: metallized (Ni) composite square flange receptacle transversally sealed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Back termination
- 1: female RJ45

Examples:
- Square flange receptacle, female RJ45 back termination: RJF 5446 21
- Metallized square flange receptacle, female RJ45 back termination: RJF 5446 2M 1
- Transversally sealed receptacle, female RJ45 back termination: RJF5446 2S1

Part number code: plug

<table>
<thead>
<tr>
<th>Shell type</th>
<th>RJF 544</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>6: composite push pull plug, plastic gland</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
RJF 5446

Receptacle
Type 2S/2M/2SM shell: square flange receptacle with 4 mounting holes

Back termination

Plug
Type 6 shell with plastic gland
p/n RJF544 6

Accessories
Rubber IP68 receptacle cap
p/n RJF 544BESC
Panel gasket
p/n RJF 544 02JE
IP68 caps for plug
p/n 544 02 BM

Panel gasket (thickness: 0.6mm [0.039]): p/n RJF 544 02 JE
Plug Insert removal tool: p/n 5440 OT 02
RJF6

CAT6 Ethernet connection system for harsh environment – Industrial Ethernet

- RJF Cat6 allows you to use an Ethernet Class E / Cat. 6 connection for 10 BaseT, 100 BaseTX or 1000 BaseT up to 250 MHz networks in harsh environments. With the patented RJStop® system you can use a standard RJ45 cordset in a metallic plug which will protect it from shocks, dusts and fluids.

- No hazardous on-field cabling and grounding!

Main features

**Applications**
- Robotics
- Industrial process control
- CNC machines
- Special machines
- Oil & Gas
- Motion control
- Data acquisition and transmission in harsh environment
- Tele-maintenance

**Data transmission**
- 10 BaseT, 100 BaseTX and 1000 BaseT up to 250 MHz networks
- Cat 6 per EIA/TIA 568 and ClassE per ISO11801

**Main characteristics**
- Compliant with IEC 60603-7 variante 11
- Bayonet coupling (“Audible & Visual” coupling signal )
- Robust metallic shells based on MIL-DTL-26482 H - Shell size 18
- RJ45 cordset retention in the plug: 100 N in the axis
- Mating cycles: 500 min
- Sealed against fluids and dust (ip68)
- Shock, vibration and traction resistant
- No cabling operation in field and no tools required
- Mechanical coding / polarization (4 positions)
- Compatible with cable diameter from 6 mm [0.236 in] to 12 mm [0.472 in]

For smaller diameters, please consult us.

**Environmental protection**
- Sealing: IP68
- Salt spray: > 48 h with aluminium shell black nickel plating
- > 96 h with aluminium shell black coating
- > 500 h with aluminium shell olive drab cadmium plating
- Fire retardant/Low smoke: UL94 V0 and EN45545
- Vibrations: 10-500Hz, 10g, 3 axes: no discontinuity >10 nano s
- Humidity: 21 days, 43°C, 98% humidity
- Temperature range: -40°C / +85°C

**How to order**

Part number code: receptacle

<table>
<thead>
<tr>
<th>Shell type</th>
<th>RJF6</th>
<th>2</th>
<th>A</th>
<th>PE</th>
<th>1</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>2: square flange receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7: jam nut receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Coding**
- A, B, C, or D

**Backshell**
- PE: IP68 backshell, plastic gland
- PEM: IP68 backshell, metal gland

**Back termination**
- 1: female RJ45

<table>
<thead>
<tr>
<th>Shell material &amp; finishes</th>
<th>ZN: aluminium shell - black zinc nickel</th>
</tr>
</thead>
<tbody>
<tr>
<td>B: aluminium shell - black coating</td>
<td>for N, G, ZN plating, the inserts are metallized</td>
</tr>
</tbody>
</table>

**Example**: square flange receptacle, coding A, female RJ45 back termination, black coating plating: RJF6 2 A 1 B

Part number code: plug see page 16 for assembly instructions

<table>
<thead>
<tr>
<th>Shell type</th>
<th>RJF</th>
<th>6</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>6: plug, plastic gland</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6M: plug, metal gland</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Shell finishes**
- B: aluminium shell - black coating
- N: aluminium shell - nickel
- G: aluminium shell - olive drab cadmium

**Example**: plug with metal gland, nickel plating: RJF 6M N

**NOTA**: also available a plug with 360° EMI backshell, and a plug for big insulation wire up to 1.6mm see pages 21 & 22.
RJF6

Receptacles

Square flange receptacle: 4 mounting holes: shell type 2

Jam nut receptacle: Hexagonal nut mounting: shell type 7

Receptacles with IP68 backshell: shell type 2PE and 7PE with plastic or metal gland

Codings

To be specified in the part number: A, B, C, or D

Back termination

Type 1
Female RJ45
**RJF6**

**Plug**

Shell type 6 with plastic or metal gland - Standard RJ45 plug not included

---

**Universal: can be used with all standard RJ45 Cat. 6 cordset brands**

---

**Assembly instructions of the RJ Stop**

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 for cabling**

---

**Accessories - How to order**

**Metallic cap**

<table>
<thead>
<tr>
<th>Connector type</th>
<th>RJFC</th>
<th>2</th>
<th>M</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RJFC: 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RJFC: 2 M G</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- B: aluminium shell - black coating
- N: aluminium shell - nickel plating
- G: aluminium shell - olive drab cadmium plating
- ZN: aluminium shell - black Zinc Nickel plating

- ✓: RoHS compliant

Panel gasket for square flange « 2 » receptacle thickness - 0,6 mm P/N: JE 18

---

**NOTA:** also available a plug with 360° EMI backshell, and a plug for big insulation wire up to 1.6mm > see pages 21 & 22.
In line receptacles allow you to make cable extensions in the field by using them with rugged RJ Field series plugs.

**Codings**

*To be specified in the part number: A, B, C, or D.*

<table>
<thead>
<tr>
<th>Part number</th>
<th>Plating</th>
<th>Plastic gland</th>
<th>Metallic gland</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Black coating</td>
<td>RJF6 2 X PEWF 1 B</td>
<td>RJF6 2 X PEMWF 1 B</td>
</tr>
<tr>
<td></td>
<td>Nickel</td>
<td>RJF6 2 X PEWF 1 N</td>
<td>RJF6 2 X PEMWF 1 N</td>
</tr>
<tr>
<td></td>
<td>Olive drab cadmium</td>
<td>RJF6 2 X PEWF 1 G</td>
<td>RJF6 2 X PEMWF 1 G</td>
</tr>
<tr>
<td></td>
<td>Black Zinc Nickel</td>
<td>RJF6 2 X PEWF 1 ZN</td>
<td>RJF6 2 X PEMWF 1 ZN</td>
</tr>
</tbody>
</table>

$X$ to be replaced by the letter of the coding position you need (A, B, C, or D).

✓: RoHS complaint
CAT6 transversally sealed receptacles

- In some applications, a transversal sealing for the receptacle is a « must ».
- This will prevent fluids and dust from going through the receptacle when plug or cap are not mated to the receptacle.
- The sealed solution (version "S") has a compound at the rear of the receptacle as shown on the picture.

Main features

Applications
- Outdoor equipment
- Airplanes equipment
- Tactical radios
- Simulators
- Rugged computers
- Data acquisition and transmission in harsh environments

Main characteristics
- Same as the RJF series
- A complete IP68 sealing of the receptacle (even with no plug or no protective cap mated) is added.
- Outside dimensions are the same as the standard RJF series

Data transmission
- 10 BaseT, 100 BaseTX and 1000 BaseT up to 250 MHz networks
- Cat 6 per EIA/TIA 568 and ClassE per ISO 11801

How to order

Part number code: receptacles

<table>
<thead>
<tr>
<th>Shell type</th>
<th>RJF6</th>
<th>2S</th>
<th>A</th>
<th>PE</th>
<th>1</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>2S: square flange receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7S: jam nut receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Coding
- A, B, C, or D

Backshells
- PE: IP68 backshell, plastic gland
- PEM: IP68 backshell, metal gland
Blank for receptacles without backshell

Back termination
- 1: female RJ45

Shell finishes
- B: aluminium shell - black coating ✓
- N: aluminium shell - nickel ✓
- G: aluminium shell - olive drab cadmium
- ZN: aluminium shell - black zinc nickel ✓

Nota: for N, G and ZN plating, the inserts are metallized

Example: sealed square flange receptacle, coding A, female RJ45 back termination, black plating >RJF6 2S A 1 B
✓: RoHS compliant
**RJF6**

**CAT6 hermetic receptacles**

- In some applications, a transversal hermiticity for the receptacle is a « must ».
- This will prevent gas from going through the receptacle when plug or cap are not mated to the receptacle.
- The hermetic solution (version "H") has a compound at the rear of the receptacle as shown on the picture.
- Helium leakage is less than $1.10^{-6}$ cm$^3$ per second [0.1 micron cubic ft per hour] at one bar [15 psi] pressure differential.

**Main features**

**Applications**
- Outdoor equipment
- Airplanes equipment
- Tactical radios
- Shelters
- Rugged computers
- Data acquisition and transmission in harsh environments

**Main characteristics**
- Same as the RJF series.
- A complete IP68 sealing of the receptacle (even with no plug or no protective cap mated) is added.
- Outside dimensions are the same as the standard RJF series.

**Data Transmission**
- 10 BaseT, 100 BaseTX and 1000 BaseT up to 250 MHz networks
- Cat 6 per EIA/TIA 568 and ClassE per ISO 11801

**IMPORTANT NOTE**
Due to the compound, the coding of the connector must be done in the factory
Use the codes A, B, C or D in the part number: see below.

**How to order**

**Part number code: receptacles**

<table>
<thead>
<tr>
<th>Shell type</th>
<th>RJF6</th>
<th>2H</th>
<th>A</th>
<th>PE</th>
<th>1</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>2H: square flange receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7H: jam nut receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Coding**
- A, B, C, or D

**Backshells**
- PE: IP68 backshell, plastic gland
- PEM: IP68 backshell, metal gland
- Blank for receptacles without backshell

**Back termination**
- 1: female RJ45

**Shell finishes**
- B: aluminium shell - black coating
- ZN: aluminium shell - black zinc nickel
- N: aluminium shell - nickel
- G: aluminium shell - olive drab cadmium

Example: square flange receptacle, coding A, female RJ45 back termination, black plating > RJF6 2H A 1 B

✓: RoHS compliant
RJF6

Sealing level IP54 - (Splash and dust Proof)

- This kit includes a receptacle and a self closing cap which protects the RJ Field square flange receptacles (MIL-DTL-26482 type).
- This cap offers a protection against dust and water projections.
- A spring automatically closes the upper part of the cap when the RJfield plug is removed from the receptacle.

RJF6 2 x 1 x SCC

RJ45 version

<table>
<thead>
<tr>
<th>Part number</th>
<th>Plating</th>
<th>Metallized Insert (EMI)</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td>RJF6 2 x 1 B SCC</td>
<td>Black coating ✓</td>
<td>No</td>
<td>RJF6 2 x 1 B SCC</td>
</tr>
<tr>
<td>RJF6 2 x 1 N SCC</td>
<td>Nickel ✓</td>
<td>Yes</td>
<td>RJF6 2 x 1 N SCC</td>
</tr>
<tr>
<td>RJF6 2 x 1 G SCC</td>
<td>Olive drab cadmium ✓</td>
<td>Yes</td>
<td>RJF6 2 x 1 G SCC</td>
</tr>
<tr>
<td>RJF6 2 x 1 ZN SCC</td>
<td>Black Zinc Nickel ✓</td>
<td>Yes</td>
<td>RJF6 2 x 1 ZN SCC</td>
</tr>
</tbody>
</table>

* The part number includes the receptacle + the self closing cap
✓: RoHS compliant

To be replaced by the letter of the coding position you need (A, B, C, or D)

Remarks:
• the back termination is female RJ45
• It could be used with our RJF series plug (part number RJF6xx ▶ see page 10)

Note: Panel gasket with any of these receptacles: JE18
- RJF series plug with EMI backshells provide a solution with 360° shielding: same protection than the one proposed by standard MIL-DTL-26482 connectors. With these solutions, we recommend using our reinforced and double shielded Cat5E, Cat6, and Cat6A cable ► see page 32 for Cat6 version.

### Plug

#### Straight backshell

![Plug Diagram]

<table>
<thead>
<tr>
<th>Part number</th>
<th>Plating</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIT30394NI</td>
<td>Nickel</td>
</tr>
<tr>
<td>KIT30394</td>
<td>Olive drab cadmium</td>
</tr>
<tr>
<td>KIT30894ZN</td>
<td>Black Zinc Nickel</td>
</tr>
</tbody>
</table>

**NOTA:** KIT30394 / KIT30394NI & KIT30394ZN include (standard RJ45 plug, not included)
Rugged plug dedicated to cable with insulation wire from 1.1 to 1.6 mm [from 0.043 in to 0.062 in]

Remark:
- Solution compatible with any RJF6 receptacle
- For cables which are not compatible with standard RJ45 plug.
- Include a Cat6A RJ45 plug

Main features

Applications
- Robotics
- Industrial process control
- CNC machines
- Special machines
- Oil & Gas
- Motion control
- Data acquisition and transmission in harsh environment
- Tele-maintenance

Data Transmission
- 10 BaseT, 100 BaseTX and 1000 BaseT up to 250 MHz networks
- Cat 6 per EIA/TIA 568 and ClassE per ISO 11801

Main characteristics
- Bayonet coupling ("Audible & Visual" coupling signal )
- Robust metallic shells based on MIL-DTL-26482 H - Shell size 18
- RJ45 cordset retention in the plug: 100 N in the axis
- Mating cycles: 500 min
- Sealed against fluids and dust (IP68)
- Shock, vibration and traction resistant
- Mechanical coding / polarization (4 positions)
- Compatible with cable diameter from 6 mm [0.216 in] to 13 mm [0.512 in]. For smaller diameters, please consult us.

Environmental protection
- Sealing: IP68
- Salt Spray: > 48 h with aluminium shell nickel plating
- > 48 h with aluminium shell black zinc nickel plating
- > 96 h with aluminium shell black coating
- > 500 h with aluminium shell olive drab cadmium
- Fire retardant/Low smoke: UL94 V0 and EN45545
- Vibrations: 10 – 500 Hz, 10 g, 3 axes: no discontinuity >10 nano s.
- Shocks: IK06 ➔ weight of 250 g drop from 40 cm [15.75 in] onto connectors (mated pair)
- Humidity: 21 days, 43°C, 98% humidity
- Temperature range: - 40°C / +85°C

Part number
- Nickel ✔️ KIT39992NI
- Olive drab cadmium KIT39992G
- Black coating ✔️ KIT39992B
- Black Zinc Nickel ✔️ KIT39992ZN

✔️: RoHS compliant
Amphenol Socapex Rugged Digital Networks Solutions (RJ Field Cat6)

Amphenol Socapex│Rugged Digital Networks Solutions (RJ Field Cat6)

Cat5e version: see Field series catalogue DOC-000075-ANG or visit www.amphenol-socapex.com

Due to technical progress, all information provided is subject to change without prior notice

Designed by Amphenol Socapex

RJF TV6

CAT6 Ethernet connection system for harsh environment

RJF TV Cat6 allows you to use an Ethernet Class E / Cat. 6 connection for 10 BaseT, 100 BaseTx or 1000 BaseT up to 250 MHz networks in harsh environments.

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 on-field cabling and grounding!

Main features

Applications

• Data acquisition and transmission in harsh environment
• Railways
• Radars
• Shelters
• Battlefield communication
• Systems
• Navy

Data Transmission

• 10 BaseT, 100 BaseTX and 1000 BaseT up to 250 MHz networks
• Cat 6 per EIA/TIA 568 and ClassE per ISO 11801

Main characteristics

• Sealed against fluids and dusts (IP68)
• Shock, vibration and traction resistant
• No cabling operation in field and no tools required
• Mechanical coding / Polarization (4 positions)
• Improved EMI protection
• Tri Start Thread coupling mechanism (MIL-DTL-38999 series III type) with anti-decoupling device - Shell size 19
• Robust metallic shells
• RJ45 cordset retention in the plug: 100 N in the axis
• Mating cycles: 500 min
• Compatible with cable diameter from 6 mm [0.236 in] to 12 mm [0.512 in].
• For smaller diameters please consult us.

Environmental protection

• Sealing: IP68
• Salt spray: > 48h with aluminium shell - Nickel
• > 500h with aluminium shell black zinc nickel plating
• > 500h with aluminium shell - Olive drab cadmium plating
• > 500h with aluminium shell marine bronze shell
• Fire retardant/Low smoke : EN45545 + UL94VO
• Vibrations : 10 - 500 Hz, 10 g, 3 axes: no discontinuity > 10 nano s.
• Compound versions tested per NAS 1599 (5-3000 Hz, 20g, 12h)
• Shocks: 9066 ➤ weight of 250 g drop from 40 cm [15.75 in] onto connectors (mated pair)
• Humidity: 21 days, 43°C, 98% humidity
• Temperature range: -40°C / +85°C

Part number code: receptacles

<table>
<thead>
<tr>
<th>Shell type</th>
<th>RJF TV6</th>
<th>2</th>
<th>A</th>
<th>PEM</th>
<th>1</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>2: square flange receptacle</td>
<td>2</td>
<td>A</td>
<td>PEM</td>
<td>1</td>
<td>G</td>
<td></td>
</tr>
<tr>
<td>7: jam nut receptacle</td>
<td>7</td>
<td>A</td>
<td>PEM</td>
<td>1</td>
<td>G</td>
<td></td>
</tr>
</tbody>
</table>

Coding

A, B, C, or D

Backshells

PE: IP68 backshell, plastic gland
PEM: IP68 backshell, metal gland
Blank for receptacles without backshell

Back termination

1: female RJ45

Shells material & Finish (inserts are metallized)

N: aluminium shell - nickel plating ✔
G: aluminium shell - olive drab cadmium plating
BZ: marine bronze shell ✔
ZC: aluminium shell - green zinc cobalt plating ✔
ZN: aluminium shell - black zinc nickel plating ✔

Example: jam nut receptacle, coding A, female RJ45 back termination, olive drab cadmium plating: RJF TV6 7 A 1 G

Part number code: plugs > see page 25

<table>
<thead>
<tr>
<th>Shell type</th>
<th>RJF TV</th>
</tr>
</thead>
<tbody>
<tr>
<td>6: plug with plastic gland</td>
<td>6</td>
</tr>
<tr>
<td>6M: plug with metal gland</td>
<td>6M</td>
</tr>
</tbody>
</table>

Shells material & Finish (inserts are metallized)

N: aluminium shell - nickel plating ✔
G: aluminium shell - olive drab cadmium plating
BZ: marine bronze shell ✔
ZC: aluminium shell - green zinc cobalt plating ✔
ZN: aluminium shell - black zinc nickel plating ✔

Example: plug with plastic gland, olive drab cadmium plating: RJF TV 6G

✔: RoHS compliant

NOTA: also available a plug with 360° EMI backshell, and a plug for big insulation wire up to 1.6mm ➤ see pages 29 & 30
RJF TV6

Receptacles

Square flange receptacle - 4 mounting holes: shell type 2

Jam nut receptacle - Hexagonal nut mounting: shell type 7

Receptacles with IP68 backshell: Shell type 2PE and 7PE with plastic or metal gland

Codings

To be specified in the part number: A, B, C, or D.

Back termination
**RJF TV6**

**Plug**

Shell type 6 with plastic or metal gland (standard RJ45 plug not included)

---

**Assembly instructions**

**Insert codings**

**Assembling of the plug**

4 codings possibilities
(defined by the customer during the assembling).

---

**IMPORTANT NOTE**

To remove the insert, use the Insert removal tool for plug
P/N: RJF ODE

---

**Accessories**

**Metallic Caps**

<table>
<thead>
<tr>
<th>Connector type</th>
<th>RJFTVC</th>
<th>2</th>
<th>M</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>6: plug</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2: square flange receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7: jam nut receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank: nylon cord</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M: stainless steel metallic chain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MR: stainless steel jacketed rope</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shell material &amp; finish</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N: aluminium shell - nickel plating ✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G: aluminium shell - olive drab cadmium plating</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZN: aluminium shell - black zinc nickel plating ✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BZ: marine bronze ✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

✔: RoHS compliant

Panel gasket for square flange receptacle

Thickness: 0.8 mm (0.031); P/N: JE19

---

**NOTA**: also available a plug with 360° EMI backshell, and a plug for big insulation wire up to 1.6mm.

see pages 29 & 30

---
RJF TV6

- Our RJFTV Cat6 through bulkhead receptacles can be connected on each side with rugged RJFTV plugs.
- This system allows mechanical protection and a sealing (IP68 when mated) inside and outside the equipment, and keeps the flexibility offered by panel mount and plug connectors.

Square flange receptacle

<table>
<thead>
<tr>
<th>Part number</th>
<th>Plating</th>
<th>Metallized insert</th>
<th>For coding A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nickel</td>
<td>No</td>
<td>RJF TV6 B 2 N ISO BRUT *</td>
</tr>
<tr>
<td></td>
<td>Nickel</td>
<td>Yes</td>
<td>RJF TV6 B 2 N ISO NI *</td>
</tr>
<tr>
<td></td>
<td>Olive drab cadmium</td>
<td>No</td>
<td>RJF TV6 B 2 G ISO BRUT *</td>
</tr>
<tr>
<td></td>
<td>Olive drab cadmium</td>
<td>Yes</td>
<td>RJF TV6 B 2 G ISO NI *</td>
</tr>
<tr>
<td></td>
<td>Black Zinc Nickel</td>
<td>No</td>
<td>RJF TV6 B 2 ZN ISO BRUT *</td>
</tr>
<tr>
<td></td>
<td>Black Zinc Nickel</td>
<td>Yes</td>
<td>RJF TV6 B 2 ZN ISO NI *</td>
</tr>
</tbody>
</table>

*: RoHS compliant

* ISO BRUT = non conductive insert
ISO NI = conductive insert

IMPORTANT NOTE
Possibility of other codings - Please consult us

Jam nut receptacle

<table>
<thead>
<tr>
<th>Part number</th>
<th>Plating</th>
<th>Metallized insert</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nickel</td>
<td>No</td>
<td>RJF TV6 B 7 N ISO BRUT *</td>
</tr>
<tr>
<td></td>
<td>Nickel</td>
<td>Yes</td>
<td>RJF TV6 B 7 N ISO NI *</td>
</tr>
<tr>
<td></td>
<td>Olive drab cadmium</td>
<td>No</td>
<td>RJF TV6 B 7 G ISO BRUT *</td>
</tr>
<tr>
<td></td>
<td>Olive drab cadmium</td>
<td>Yes</td>
<td>RJF TV6 B 7 G ISO NI *</td>
</tr>
<tr>
<td></td>
<td>Black Zinc Nickel</td>
<td>No</td>
<td>RJF TV6 B 7 ZN ISO BRUT *</td>
</tr>
<tr>
<td></td>
<td>Black Zinc Nickel</td>
<td>Yes</td>
<td>RJF TV6 B 7 ZN ISO NI *</td>
</tr>
</tbody>
</table>

*: RoHS compliant

* ISO BRUT = non conductive insert
ISO NI = conductive insert
RJF TV6

CAT6 transversally sealed receptacles

- In some applications, a transversal sealing for the receptacle is a « must ». This will prevent fluids and dust from going through the receptacle when plug or cap are not mated to the receptacle.
- The sealed solution (version "S") has a compound at the rear of the receptacle as shown on the picture.
- The Sealed RJF TV has been successfully tested in very high vibration corresponding to airplane applications.

Main features

Applications
- Outdoor equipment
- Airplanes equipment
- Tactical radios
- Shelters
- Rugged computers
- Data acquisition and transmission in harsh environments

Main characteristics
- Same as the RJF TV series.
- A complete IP68 sealing of the receptacle (even with no plug or no protective cap mated) is added.
- Outside dimensions are the same as the standard RJF TV series.
- Vibrations: the compounded versions of the RJF TV have been tested in vibration following the NAS 1599 Aeronautic specification (Ambient temperature):
  5 - 8000 Hz, 20g, 2.5 mm [0.1 inch] double amplitude, 3 axes, 12 hours
  Note: this specification exceeds MIL-C-26500 requirements.

Data transmission
- 10 BaseT, 100 BaseTX and 1000 BaseT up to 250 MHz networks
- Cat 6 per EIA/TIA 568 and ClassE per ISO 11801

IMPORTANT NOTE
Due to the compound, the coding of the connector must be done in the factory: use the codes A, B, C or D in the part number: see below.

Part number code: receptacles

<table>
<thead>
<tr>
<th>Shell type</th>
<th>RJF TV6</th>
<th>2S</th>
<th>A</th>
<th>PEM</th>
<th>1</th>
<th>G</th>
</tr>
</thead>
</table>

Example: sealed jam nut receptacle, coding A, female RJ45 back termination, olive drab cadmium plating: RJF TV6 7S A 1 G

✓✓: RoHS compliant
Amphenol Socapex | Rugged Digital Networks Solutions (RJ Field Cat6)

**CAT6 hermetic receptacles**

- In some applications, a transversal hermiticity for the receptacle is a «must».
- This will prevent gas from going through the receptacle when plug or cap are not mated to the receptacle.
- The hermetic solution (version “H”) has a compound at the rear of the receptacle as shown on the picture.
- Helium leakage is less than \(1.1 \times 10^{-6}\) cm\(^3\) per second [0.1 micron cubic ft per hour] at one bar [15 psi] pressure differential.

**Main features**

**Applications**
- Outdoor equipment
- Aircraft equipment
- Tactical radios
- Shelters
- Rugged computers
- Data acquisition and transmission in harsh environments

**Main characteristics**
- Same as the RJF TV series.
- A complete IP68 sealing of the receptacle (even with no plug or no protective cap mated) is added.
- Outside dimensions are the same as the standard RJF TV series.
- Vibrations: the compounded versions of the RJF TV have been tested in vibration following the NAS 1599 Aeronautic specification (Ambient temperature):
  - 5 - 3000 Hz, 20g, 2.5 mm [.1 inch] double amplitude, 3 axes, 12 hours
  - Note: this specification exceeds MIL-C-26560 requirements.

**Data Transmission**
- 10 BaseT, 100 BaseTX and 1000 BaseT up to 250 MHz networks
- Cat 6 per EIA/TIA 568 and ClassE per ISO 11801

**Part number code: receptacles**

<table>
<thead>
<tr>
<th>Shell type</th>
<th>RJF TV6</th>
<th>2H</th>
<th>A</th>
<th>PEM</th>
<th>1</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>2H: square flange receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7H: jam nut receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A, B, C, or D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Backshells</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE: IP68 backshell, plastic gland</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEM: IP68 backshell, metal gland</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blank for receptacles without backshell</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Back terminations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1: female RJ45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shells material &amp; Finish (inserts are metallized)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N: aluminium shell - nickel plating ✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G: aluminium shell - olive drab cadmium plating ✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BZ: marine bronze shell ✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZC: aluminium shell: green zinc cobalt plating ✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZNC: aluminium shell - black zinc nickel plating ✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Example: sealed jam nut receptacle, coding A, female RJ45 back termination, olive drab cadmium plating: RJF TV6 7H A 1 G

✓: RoHS compliant
RJF TV

Plug with 360° EMI backshells

- RJFTV series plugs with EMI backshells provide a solution with 360° shielding: same protection than the one proposed by standard MIL-DTL-38999 series III connectors.
- With those solutions we recommend using our reinforced and double shielded Cat5E, Cat6, and Cat6A cable.

Plug
Straight backshell

Right angle backshell

<table>
<thead>
<tr>
<th>Part number</th>
<th>Plating</th>
<th>P/N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nickel</td>
<td>KIT38081NI</td>
</tr>
<tr>
<td></td>
<td>Olive drab cadmium</td>
<td>KIT38081</td>
</tr>
<tr>
<td></td>
<td>Black zinc nickel</td>
<td>KIT38081ZN</td>
</tr>
<tr>
<td></td>
<td>Green zinc cobalt</td>
<td>KIT38081ZC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part number</th>
<th>Plating</th>
<th>P/N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nickel</td>
<td>KIT40792NI</td>
</tr>
<tr>
<td></td>
<td>Olive drab cadmium</td>
<td>KIT40792</td>
</tr>
</tbody>
</table>

NOTA: Kit38081 / Kit40792 include (standard RJ45 not included)
With these plugs, the standard RJ45 plug is not provided.
Customer will have to crimp a standard RJ45 on the cable by himself.

- Remark: we advise using our double shielded, reinforced Cat6 cables (see page 27) with these RJFTV series EMI connectors.
- If customer wants to use his own cable, please check with us regarding compatibility with our backshells: contact@rjfield.com.
- We also provide assembled cordsets (see example below).
- For this type of solution please provide the configuration needed: length, description of second end...

Example of assembled cordset:
**Amphenol Socapex | Rugged Digital Networks Solutions (RJ Field Cat6)**

**RJF TV**

Special RJF TV plug dedicated to Ethernet cable with insulation wire from 1.1 to 1.6 mm.

Remark:
- compatible with any RJF TV6 receptacle
- for cables which are not compatible with standard RJ45 plug
- include a cat6A RJ45 plug

**Main features**

**Applications**
- Robotics
- Industrial process control
- CNC machines
- Special machines
- Oil & Gas
- Motion control
- Data acquisition and transmission in harsh environment
- Tele-maintenance

**Main characteristics**
- Sealed against fluids and dusts (IP68)
- Shock, vibration and traction resistant
- No cabling operation in field and no tools required
- Mechanical coding / Polarization (4 positions)
- Improved EMI protection
- Tri Start Thread coupling mechanism (MIL-DTL-38999 series III type) with anti-decoupling device - Shell size 19
- Robust metallic shells
- RJ45 cordset retention in the plug: 100 N in the axis
- Mating cycles: 500 mm
- Compatible with cable diameter from 6 mm [0.236 in] to 13 mm [0.512 in]

*For smaller diameters please consult us*

**Data Transmission**
- 10 BaseT, 100 BaseTX and 1000 BaseT up to 250 MHz networks
- Cat 6 per EIA/TIA 568 and ClassE per ISO 11801

**Environmental protection**
- Sealing: IP68
- Salt spray: > 48 h with aluminium shell nickel plating
- > 500 h with aluminium shell marine bronze
- > 500 h with aluminium shell black zinc nickel
- > 500 h with aluminium shell olive drab cadmium
- Fire retardant/Low smoke: UL94 V0 and EN45545
- Vibrations: 10 – 500 Hz, 10 g, 3 axes: no discontinuity > 10 nano s.
- Shocks: IK06 >weight of 250 g drop from 40 cm [15.75 in] onto connectors (mated pair)
- Humidity: 21 days, 43°C, 98% humidity
- Temperature range: - 40°C / +85°C

**Applications**

- Robotics
- Industrial process control
- CNC machines
- Special machines
- Oil & Gas
- Motion control
- Data acquisition and transmission in harsh environment
- Tele-maintenance

**Environmental protection**

- Sealing: IP68
- Salt spray: > 48 h with aluminium shell nickel plating
- > 500 h with aluminium shell marine bronze
- > 500 h with aluminium shell black zinc nickel
- > 500 h with aluminium shell olive drab cadmium
- Fire retardant/Low smoke: UL94 V0 and EN45545
- Vibrations: 10 – 500 Hz, 10 g, 3 axes: no discontinuity > 10 nano s.
- Shocks: IK06 >weight of 250 g drop from 40 cm [15.75 in] onto connectors (mated pair)
- Humidity: 21 days, 43°C, 98% humidity
- Temperature range: - 40°C / +85°C

**Main features**

- Sealed against fluids and dusts (IP68)
- Shock, vibration and traction resistant
- No cabling operation in field and no tools required
- Mechanical coding / Polarization (4 positions)
- Improved EMI protection
- Tri Start Thread coupling mechanism (MIL-DTL-38999 series III type) with anti-decoupling device - Shell size 19
- Robust metallic shells
- RJ45 cordset retention in the plug: 100 N in the axis
- Mating cycles: 500 mm
- Compatible with cable diameter from 6 mm [0.236 in] to 13 mm [0.512 in]

*For smaller diameters please consult us*

**Data Transmission**

- 10 BaseT, 100 BaseTX and 1000 BaseT up to 250 MHz networks
- Cat 6 per EIA/TIA 568 and ClassE per ISO 11801

**Environmental protection**

- Sealing: IP68
- Salt spray: > 48 h with aluminium shell nickel plating
- > 500 h with aluminium shell marine bronze
- > 500 h with aluminium shell black zinc nickel
- > 500 h with aluminium shell olive drab cadmium
- Fire retardant/Low smoke: UL94 V0 and EN45545
- Vibrations: 10 – 500 Hz, 10 g, 3 axes: no discontinuity > 10 nano s.
- Shocks: IK06 >weight of 250 g drop from 40 cm [15.75 in] onto connectors (mated pair)
- Humidity: 21 days, 43°C, 98% humidity
- Temperature range: - 40°C / +85°C

**Part number**

<table>
<thead>
<tr>
<th>Plating</th>
<th>P/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium shell - Nickel</td>
<td>35660</td>
</tr>
<tr>
<td>Aluminium shell - Olive drab cadmium</td>
<td>35660G</td>
</tr>
<tr>
<td>Aluminium shell - Black zinc nickel</td>
<td>35660ZN</td>
</tr>
<tr>
<td>Marine bronze shell</td>
<td>35661</td>
</tr>
</tbody>
</table>

✓: RoHS compliant
RJF TV

Self Closing Cap (SCC series) for RJFTV6 receptacles

This Self Closing Cap automatically protects the RJF TV receptacles (MIL-DTL-38999 type), protecting your system from dust and water projection. A spring automatically closes the upper part of the cap when the RJF TV plug is removed from the receptacle.

Square flange receptacle Self Closing Cap

Sealing level
IP67

IMPORTANT NOTE
- Metal self closing cap are sold separately (without receptacle).
- This self closing cap must be used with reinforced RJFTV plugs.

Jam nut receptacle Self Closing Cap

IMPORTANT NOTE
- Metal Self Closing Cap are sold separately (without receptacle).
- This Self Closing Cap must be used with reinforced RJFTV plugs.

<table>
<thead>
<tr>
<th>Part number</th>
<th>Plating</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Black coating ✓</td>
<td>RJF TV SCC B</td>
</tr>
<tr>
<td></td>
<td>Nickel ✓</td>
<td>RJF TV SCC N</td>
</tr>
<tr>
<td></td>
<td>Olive drab cadmium</td>
<td>RJFTV SCC G</td>
</tr>
<tr>
<td></td>
<td>Black Zinc Nickel ✓</td>
<td>RJFTV SCC ZN</td>
</tr>
</tbody>
</table>

Remarks:
- RoHS compliant
- Compatible with RJFTV6 square flange receptacle type RJFTV6 2xxx only

<table>
<thead>
<tr>
<th>Part number</th>
<th>Plating</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Black coating ✓</td>
<td>RJF TV 7 SCC B</td>
</tr>
<tr>
<td></td>
<td>Nickel ✓</td>
<td>RJF TV 7 SCC N</td>
</tr>
<tr>
<td></td>
<td>Olive drab cadmium</td>
<td>RJFTV 7 SCC G</td>
</tr>
<tr>
<td></td>
<td>Black zinc nickel ✓</td>
<td>RJF TV 7 SCC ZN</td>
</tr>
</tbody>
</table>

Remarks:
- RoHS compliant
- Compatible with RJFTV6 jam nut receptacle type RJFTV6 2xxx only
CAT6 CABLE

High reliability Cat 6 Ethernet cable & cordsets

General construction
A 4 pairs, 26 AWG, 100 Ohm SFTP round patch cable, designed to the ISO 11801 Category 6 requirements. The cable contains 4 twisted pairs individually shielded, cabled, double shielded with kevlar reinforcement strands, jacketed in black UV resistant Polyurethane HFFR. Designed for fixed or portable applications in harsh environments.

HFFR: Halogen Free Flame Retardant

Jacket compound specification:
- Halogen free flame retardant polyether-based polyurethane
- Excellent hydrolysis resistance
- Resistance to microbial/fungus growth:
- - MIL-STD-810G, method 508.6 = grade 1
- - Glossy finish
- - UV resistant
- - High flexibility

Main features

Applications
- Robotics
- CNC machines
- Motion control
- Battlefield communication
- Railways
- Industrial process control

Electrical characteristics (at 20°C - 68°F)

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>DC Resistance (mOhm/km)</th>
<th>Impedance (100 MHz) (Ohm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 MHz</td>
<td>3.1 dB</td>
<td>75.3 dB min.</td>
</tr>
<tr>
<td>4 MHz</td>
<td>5.8 dB</td>
<td>66.3 dB min.</td>
</tr>
<tr>
<td>8 MHz</td>
<td>8.0 dB</td>
<td>61.8 dB min.</td>
</tr>
<tr>
<td>10 MHz</td>
<td>9.0 dB</td>
<td>60.3 dB min.</td>
</tr>
<tr>
<td>16 MHz</td>
<td>11.4 dB</td>
<td>57.2 dB min.</td>
</tr>
<tr>
<td>20 MHz</td>
<td>12.8 dB</td>
<td>55.8 dB min.</td>
</tr>
<tr>
<td>25 MHz</td>
<td>14.1 dB</td>
<td>54.3 dB min.</td>
</tr>
<tr>
<td>31.25 MHz</td>
<td>16.1 dB</td>
<td>52.8 dB min.</td>
</tr>
<tr>
<td>62.5 MHz</td>
<td>23.2 dB</td>
<td>48.4 dB min.</td>
</tr>
<tr>
<td>100 MHz</td>
<td>29.9 dB</td>
<td>45.3 dB min.</td>
</tr>
<tr>
<td>200 MHz</td>
<td>43.7 dB</td>
<td>40.8 dB min.</td>
</tr>
<tr>
<td>250 MHz</td>
<td>49.7 dB</td>
<td>39.3 dB min.</td>
</tr>
</tbody>
</table>

(Near-End Crosstalk Loss N.E.X.T.)

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Insertion loss (dB/100m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 MHz</td>
<td>75.3 dB min.</td>
</tr>
<tr>
<td>4 MHz</td>
<td>66.3 dB min.</td>
</tr>
<tr>
<td>8 MHz</td>
<td>61.8 dB min.</td>
</tr>
<tr>
<td>10 MHz</td>
<td>60.3 dB min.</td>
</tr>
<tr>
<td>16 MHz</td>
<td>57.2 dB min.</td>
</tr>
<tr>
<td>20 MHz</td>
<td>55.8 dB min.</td>
</tr>
<tr>
<td>25 MHz</td>
<td>54.3 dB min.</td>
</tr>
<tr>
<td>31.25 MHz</td>
<td>52.8 dB min.</td>
</tr>
<tr>
<td>62.5 MHz</td>
<td>48.4 dB min.</td>
</tr>
<tr>
<td>100 MHz</td>
<td>45.3 dB min.</td>
</tr>
<tr>
<td>200 MHz</td>
<td>40.8 dB min.</td>
</tr>
<tr>
<td>250 MHz</td>
<td>39.3 dB min.</td>
</tr>
</tbody>
</table>

(Data for the cable alone only (without RJ45 plug))

Reel of cable (without RJ45 plug on ends)

<table>
<thead>
<tr>
<th>Length (m / ft)</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 m / 328 ft</td>
<td>191-031179-00</td>
</tr>
<tr>
<td>300 m / 984 ft</td>
<td>191-031179-01</td>
</tr>
</tbody>
</table>

Physical characteristics

Conductors: 26 AWG (0.14 mm²) tinned copper
Insulation: Polyethylene Nom. Dia. 0.039" (1mm)
Assembly: Pairs cabled with Kevlar strength members and separation tape wrapped
Shields:
- Inner: aluminium mylar 100% coverage tinned copper braid 80% coverage
- Outer: Black, special PUR compound
Jacket:
- Black, special PUR compound
Outside diam.:
- 0.272" (6.9 mm) nom.
Min bend radius (During installation):
- 72mm (10x O. D.)
Min bend radius (During operation):
- 36mm (5 x O. D.)
Temperature:
- -40°C (-40°F) / + 85°C (185°F)

Cordsets with a RJ45 plug overmolded on each end

<table>
<thead>
<tr>
<th>Length (m / ft)</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.75 m / 2.46 ft</td>
<td>RJF SFTP 6 0075</td>
</tr>
<tr>
<td>1.00 m / 3.28 ft</td>
<td>RJF SFTP 6 0100</td>
</tr>
<tr>
<td>1.50 m / 4.92 ft</td>
<td>RJF SFTP 6 0150</td>
</tr>
<tr>
<td>2.00 m / 6.56 ft</td>
<td>RJF SFTP 6 0200</td>
</tr>
<tr>
<td>2.50 m / 8.20 ft</td>
<td>RJF SFTP 6 0250</td>
</tr>
<tr>
<td>3.00 m / 9.84 ft</td>
<td>RJF SFTP 6 0300</td>
</tr>
<tr>
<td>3.50 m / 11.48 ft</td>
<td>RJF SFTP 6 0350</td>
</tr>
<tr>
<td>4.00 m / 13.12 ft</td>
<td>RJF SFTP 6 0400</td>
</tr>
<tr>
<td>4.50 m / 14.76 ft</td>
<td>RJF SFTP 6 0450</td>
</tr>
<tr>
<td>5.00 m / 16.40 ft</td>
<td>RJF SFTP 6 0500</td>
</tr>
<tr>
<td>6.00 m / 19.68 ft</td>
<td>RJF SFTP 6 0600</td>
</tr>
<tr>
<td>7.00 m / 22.96 ft</td>
<td>RJF SFTP 6 0700</td>
</tr>
<tr>
<td>8.00 m / 26.24 ft</td>
<td>RJF SFTP 6 0800</td>
</tr>
<tr>
<td>9.00 m / 29.52 ft</td>
<td>RJF SFTP 6 0900</td>
</tr>
<tr>
<td>10.00 m / 32.80 ft</td>
<td>RJF SFTP 6 1000</td>
</tr>
<tr>
<td>12.00 m / 39.37 ft</td>
<td>RJF SFTP 6 1200</td>
</tr>
<tr>
<td>15.00 m / 49.21 ft</td>
<td>RJF SFTP 6 1500</td>
</tr>
<tr>
<td>20.00 m / 65.60 ft</td>
<td>RJF SFTP 6 2000</td>
</tr>
<tr>
<td>25.00 m / 81.28 ft</td>
<td>RJF SFTP 6 2500</td>
</tr>
<tr>
<td>30.00 m / 98.43 ft</td>
<td>RJF SFTP 6 3000</td>
</tr>
<tr>
<td>35.00 m / 114.80 ft</td>
<td>RJF SFTP 6 3500</td>
</tr>
<tr>
<td>40.00 m / 131.20 ft</td>
<td>RJF SFTP 6 4000</td>
</tr>
<tr>
<td>45.00 m / 147.60 ft</td>
<td>RJF SFTP 6 4500</td>
</tr>
<tr>
<td>50.00 m / 164.80 ft</td>
<td>RJF SFTP 6 5000</td>
</tr>
<tr>
<td>60.00 m / 196.80 ft</td>
<td>RJF SFTP 6 6000</td>
</tr>
</tbody>
</table>

Capacitance (1 kHz):
- 50pF/km nom.
Capacitance unbalance:
- 1600 pF/km max.
Insulation resistance:
- 5 GOhm/km
Voltage rating (peak):
- 230 V
Dielectric strength:
- VAC/1 min - 700 V/Min
Propagation delay:
- 4.6 ns/m
Skew:
- 45 ns/100m
Resistance unbalance:
- 2%
Return loss (250 MHz):
- 15.6 dB
Velocity of propagation:
- 72% nom.

Main features

- High reliability Cat 6 Ethernet cable & cordsets
- Polyether-based Polyurethane HFFR
- Kevlar strength members
- Separation tape wrapped
- Black, special PUR compound
- UV resistant
- High flexibility
- Halogen free flame retardant
- Excellent hydrolysis resistance
- Glossy finish
- Resistance to microbial/fungus growth:
- - MIL-STD-810G, method 508.6 = grade 1
- - High flexibility
- - UV resistant
- - High reliability
Amphenol Socapex | Rugged Digital Networks Solutions (RJ Field Cat6)

RJF TVX6

CAT6 RJ45 explosion proof solution for Zone 2

- Amphenol Atex Field Bus range is designed for device group II category 3G. According to EN60079-15 it may be operated within zone 2 and class I, Division 2, as low power non sparking connectors.
- RJF TVX6 allows you to use an Ethernet Class E / Cat.6 connection for 10 BaseT, 100 BaseTx or 1000 BaseT networks up to 250 MHz in ATEX zone 2 environments. 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. RJF TVX6 features the same main characteristics as RJFTV6 series.

Main features

Main characteristics

- Ex marking : II3G ExnAIIT6 X
- Operating temperature range : -40°C / +60°C
- Voltage : 60 Veff max
- Power : 20 W max
- Outside cable diameter : 6mm to 12mm
- Sealing : IP68
- Data transmission : 10 BaseT, 100 BaseTX & 1000 BaseT up to 250 MHz networks. Cat. 6 per EIA/TIA 568 & Class E per ISO 11801

Part number code: receptacles

<table>
<thead>
<tr>
<th>Series</th>
<th>Shell Type</th>
<th>Coding</th>
<th>Backshells</th>
<th>Shell Material and Finish (inserts are metallized):</th>
</tr>
</thead>
</table>
| RJF TVX6 | 2S: square flange receptacle | "A" (Standard) or "B", "C", "D" | PEM: IP68 backshell, metal gland Blank for receptacles without backshell | N: aluminium shell - Nickel plating ✓
G: aluminium shell - Olive drab cadmium plating
ZN: aluminium shell - Black zinc nickel plating ✓

Example: jam nut receptacle, A coding, with female RJ45 back termination, olive drab cadmium plating: RJF TVX6 7SA 1 G

Part number code: plug

<table>
<thead>
<tr>
<th>Series</th>
<th>Shell Type</th>
<th>Shell Material and Finish:</th>
</tr>
</thead>
</table>
| RJF TVX | 6M: plug with metal gland | N: aluminium shell - Nickel plating ✓
G: aluminium shell - Olive drab cadmium plating
ZN: aluminium shell - Black zinc nickel plating ✓

Example: plug, olive drab cadmium plating: RJF TVX6 6MG
✓: RoHS compliant

Due to technical progress, all information provided is subject to change without prior notice.
**Receptacles**

Square flange receptacle - 4 mounting holes: shell type 2

**Jam nut receptacle**

**Codings**

To be specified in the part number: A, B, C, or D.

**Back termination**

Type 1
Female RJ45
Plug
Shell type 6 with metal gland (standard RJ45 plug not included)

Assembling of the plug.

IMPORTANT NOTE
- to remove the insert, use the insert removal tool for plug
P/N: RJF ODE

Assembly instructions
Insert codings

4 codings possibilities
(defined by the customer during the assembling).

Accessories
Metallic Caps

Plug Cap
Receptacle Cap
ABOUT AMPHENOL

Founded in 1932, **Amphenol** is one of the largest manufacturers of interconnect products in the world. The company designs, manufactures, and markets electrical, electronic, and fiber optic connectors, interconnect systems, and coaxial and specialty cables.

**Amphenol** has a diversified presence as a leader in high growth areas of the interconnect industry and provides solutions for customers in the automotive, broadband, industrial, information technology and data communications, military and aerospace, mobile devices, and mobile networks markets.

More info on [www.amphenol.com](http://www.amphenol.com)

---

**Amphenol Military & Aerospace Operations (AMAO)** has the largest and broadest selection of interconnect products in the military and aerospace markets.

More info on [www.amphenolmao.com](http://www.amphenolmao.com)

---

### Europe

<table>
<thead>
<tr>
<th>Country</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRANCE</td>
<td>Amphenol AIR LIB</td>
<td>+33 3 24 22 78 45</td>
</tr>
<tr>
<td>FRANCE</td>
<td>Amphenol SEFEE</td>
<td>+33 5 65 98 11 00</td>
</tr>
<tr>
<td>GERMANY</td>
<td>Amphenol AIR LB GMBH</td>
<td>+49 6831 981 00</td>
</tr>
<tr>
<td>ITALY</td>
<td>Amphenol EUROPEAN SALES OPERATIONS</td>
<td>+39 293 254 214</td>
</tr>
<tr>
<td>UNITED KINGDOM</td>
<td>Amphenol INVOTECH</td>
<td>+44 1827 263 000</td>
</tr>
<tr>
<td>UNITED KINGDOM</td>
<td>Amphenol IONIX SYSTEMS</td>
<td>+44 1 942 865 200</td>
</tr>
<tr>
<td>UNITED KINGDOM</td>
<td>Amphenol LTD</td>
<td>+44 1227 773 200</td>
</tr>
<tr>
<td>UNITED KINGDOM</td>
<td>Amphenol MARTEC</td>
<td>+44 1227 773 233</td>
</tr>
</tbody>
</table>

---

### North America

<table>
<thead>
<tr>
<th>Country</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>CANADA</td>
<td>Amphenol CANADA</td>
<td>+1 416 291 0647</td>
</tr>
<tr>
<td>USA</td>
<td>Amphenol AERO SPACE OPERATIONS</td>
<td>+1 800 678 0141</td>
</tr>
<tr>
<td>USA</td>
<td>Amphenol BORISH TECHNOLOGIES</td>
<td>+1 616 554 9820</td>
</tr>
<tr>
<td>USA</td>
<td>Amphenol FSI</td>
<td>+1 214 547 2400</td>
</tr>
<tr>
<td>USA</td>
<td>Amphenol GRIFFITH ENTERPRISES</td>
<td>+1 928 634 3685</td>
</tr>
<tr>
<td>USA</td>
<td>Amphenol NEXUS TECHNOLOGIES</td>
<td>+1 203 327 3300</td>
</tr>
<tr>
<td>USA</td>
<td>Amphenol PCO</td>
<td>+1 978 624 3400</td>
</tr>
<tr>
<td>USA</td>
<td>Amphenol PRINTED CIRCUIT</td>
<td>+1 603 324 4500</td>
</tr>
<tr>
<td>USA</td>
<td>Amphenol SV MICROWAVE</td>
<td>+1 561 840 1800</td>
</tr>
<tr>
<td>USA</td>
<td>Amphenol TIMES MICROWAVE</td>
<td>+1 800 867 2629</td>
</tr>
</tbody>
</table>

---

### Asia

<table>
<thead>
<tr>
<th>Country</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHINA</td>
<td>Amphenol PCO CO.</td>
<td>+86 755 8173 8000/8286</td>
</tr>
<tr>
<td>INDIA</td>
<td>Amphenol INTERCONNECT INDIA</td>
<td>+91 20 27120363</td>
</tr>
<tr>
<td>JAPAN</td>
<td>Amphenol JAPAN</td>
<td>+81 77 553 8501</td>
</tr>
<tr>
<td>KOREA</td>
<td>Amphenol DAESHIN</td>
<td>+81 32 610 3830/3845</td>
</tr>
<tr>
<td>SINGAPORE</td>
<td>Amphenol EAST ASIA</td>
<td>+65 6294 2128</td>
</tr>
</tbody>
</table>

---

### Other Areas

<table>
<thead>
<tr>
<th>Country</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRICA</td>
<td>Amphenol AFRICA</td>
<td>+27 82 410 5179</td>
</tr>
<tr>
<td>ARGENTINA</td>
<td>Amphenol ARGENTINA</td>
<td>+54 11 4185 6886</td>
</tr>
<tr>
<td>AUSTRALIA</td>
<td>Amphenol AUSTRALIA PTY</td>
<td>+61 3 8796 8888</td>
</tr>
<tr>
<td>BRAZIL</td>
<td>Amphenol DO BRAZIL</td>
<td>+55 11 3815 1003</td>
</tr>
<tr>
<td>ISRAEL</td>
<td>Amphenol BAR-TEC</td>
<td>+972 9 764 4100</td>
</tr>
<tr>
<td>MEXICO</td>
<td>Amphenol OPTIMIZE</td>
<td>+52 631 311 160</td>
</tr>
<tr>
<td>NEW ZEALAND</td>
<td>Amphenol PHITEK</td>
<td>+64 9 524 2994</td>
</tr>
<tr>
<td>RUSSIA</td>
<td>Amphenol RUSSIA</td>
<td>+7 495 937 6341</td>
</tr>
<tr>
<td>TURKEY</td>
<td>Amphenol TURKEY</td>
<td>+90 212 367 92 19</td>
</tr>
</tbody>
</table>

---

Due to technical progress, all information provided is subject to change without prior notice

---

**Amphenol SOCAPEX**

**Rugged Digital Networks Solutions (RJ Field Cat6)**

---

39