RJFTV allows you to use an Ethernet Class D / Cat. 5e connection for 10 BaseT, 100 BaseTx or 1000 BaseT 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 characteristics
- Sealed against fluids and dusts (IP68)
- Shock, vibration and traction resistant
- 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 13 mm [0.512 in], for smaller diameters please consult us

Environmental protection
- Sealing: IP68
- Salt spray: 48h with aluminium shell - Nickel, & black zinc cobalt plating > 500h with aluminium shell - Olive drab cadmium plating 500 h with marine bronze shell
- Fire retardant/Low smoke : UL94 V0 and NF F 16 101 & 16 102
- Vibrations : 10 - 500 Hz, 10 g, 3 axes: no discontinuity > 10 nano s.
- Compounded versions tested per NAS 1599 (5-3000 Hz, 20g, 12h)
- Shocks: IK06 >weight of 250 g drop from 40 cm [15.75 in] onto connectors (mated pair)
- Humidity: 21 days, 43°C, 98% humidity
- Thermal shock: 5 cycles at -40°C / +100°C
- Temperature range: -40°C / +85°C

Part number code

Shell type
- 6: plug with plastic gland
- 6M: plug with metal gland
- 2: square flange receptacle
- 2PE: square flange receptacle, IP68 backshell, plastic gland
- 2PEM: square flange receptacle, IP68 backshell, metal gland
- 7: jam nut receptacle
- 7PE: jam nut receptacle, IP68 backshell, plastic gland
- 7PEM: jam nut receptacle, IP68 backshell, metal gland

Not available a transversally sealed receptacle (unmated) => See page 36

Back terminations (receptacles only)
- 1: female RJ45
- 1RA: right angle female RJ45
- 2: RJ45 Cordset

Shells material & Finish
- N: aluminium shell - nickel plating (receptacle inserts are metallized) - ROHS compliant
- G: aluminium shell - olive drab cadmium plating (receptacle inserts are metallized)
- BZ: marine bronze shell (receptacle inserts are metallized) - ROHS compliant
- BZC: aluminium shell - black zinc cobalt plating
- ZC: aluminium shell - green zinc cobalt plating - ROHS compliant
- ZN: aluminium shell - black zinc nickel plating - ROHS compliant

Cordset length (Type 2 back termination only) - Other lengths are available on demand
- 03 100 BTX: 0.3m [11.81 inches]
- 05 100 BTX: 0.5m [19.68 inches]
- 10 100 BTX: 1m [39.37 inches]
- 00: 8 tinned holes at the rear of the PCB to solder the cable
- OPEN: open cable - with no plug at the end

Remark: cabling configuration 100 BTX = 568B (Ethernet specification)
Examples:
- Olive drab cadmium plug with plastic gland: RJF TV 6G
- Olive drab cadmium jam nut receptacle, female RJ45 back termination: RJF TV 71G
- Nickel jam nut receptacle, 1,5 m 100 BTX cordset back termination: RJF TV 72N 15 1008TX
- Olive drab cadmium in line square flange recept, 0.3 m 100 BTX cordset back termination: RJF TV 2PE 2 G 03 1008TX
- Nickel jam nut receptacle solder termination 8 tinned holes: RJF TV 22 N 00
Plug
- Shell type 6 with plastic or metal gland

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

Back terminations
- Type 1: Female RJ45
- Type 1RA: Right angle female RJ45
- Type 2: RJ45 connector
- Type OPEN: No plug at the end
- Type 2-00: Solder - 8 tinned holes
Assembly instructions

Insert codings

Assembling of the plug.

Assembling of the receptacle.

Accessories

Metallic Caps

<table>
<thead>
<tr>
<th>Connector type</th>
<th>RJFTVC</th>
<th>2</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>6: plug</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2: square flange receptacle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7: jam nut receptacle</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Shell material & finish

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

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

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

Panel gasket for square flange receptacle
Thickness: 0.8 mm [.031]):
P/n: JE19

Plug Cap end

Square flange receptacle cap end

Jam Nut receptacle cap end
This Self Closing cap automatically protects the RJF TV square flange receptacle (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.

**IMPORTANT NOTE**
Metal Self Closing cap are sold separately (without receptacle).

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

**Remark:** compatible with RJFTV square flange receptacle type RJFTV2xxx only *(see page 26).*
RJFTV series receptacles and 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, or Ca6A cable.

See pages 41-42-43

RJF TV
Receptacles & plugs with 360° EMI backshells

**Square flange receptacle - Straight backshell**

<table>
<thead>
<tr>
<th>Part number</th>
<th>Plating</th>
<th>P/N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nickel - ROHS compliant</td>
<td>Kit38082Ni</td>
</tr>
<tr>
<td></td>
<td>Olive drab cadmium</td>
<td>Kit38082</td>
</tr>
<tr>
<td></td>
<td>Green zinc cobalt - ROHS compliant</td>
<td>Kit38082ZC</td>
</tr>
<tr>
<td></td>
<td>Black zinc cobalt - ROHS compliant</td>
<td>Kit38082ZN</td>
</tr>
</tbody>
</table>

Kit38082 and Kit40791 include:

- J45 receptacle
- Panel drilling
- Backshell body
- Part
- Heat shrink sleeve
- 2 metallized inserts

**Square flange receptacle - 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 - ROHS compliant</td>
<td>Kit40791Ni</td>
</tr>
<tr>
<td></td>
<td>Olive drab cadmium</td>
<td>Kit40791</td>
</tr>
<tr>
<td></td>
<td>Green zinc cobalt - ROHS compliant</td>
<td>Kit40791ZC</td>
</tr>
<tr>
<td></td>
<td>Black zinc cobalt - ROHS compliant</td>
<td>Kit40791ZN</td>
</tr>
</tbody>
</table>

**Jam nut receptacle - Straight backshell**

<table>
<thead>
<tr>
<th>Part number</th>
<th>Plating</th>
<th>P/N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nickel - ROHS compliant</td>
<td>Kit38204NI</td>
</tr>
<tr>
<td></td>
<td>Olive drab cadmium</td>
<td>Kit38204</td>
</tr>
<tr>
<td></td>
<td>Green zinc cobalt - ROHS compliant</td>
<td>Kit38204ZC</td>
</tr>
<tr>
<td></td>
<td>Black zinc cobalt - ROHS compliant</td>
<td>Kit38204ZN</td>
</tr>
</tbody>
</table>

**Jam nut receptacle - 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 - ROHS compliant</td>
<td>Kit40771NI</td>
</tr>
<tr>
<td></td>
<td>Olive drab cadmium</td>
<td>Kit40771</td>
</tr>
<tr>
<td></td>
<td>Green zinc cobalt - ROHS compliant</td>
<td>Kit40771ZC</td>
</tr>
<tr>
<td></td>
<td>Black zinc cobalt - ROHS compliant</td>
<td>Kit40771ZN</td>
</tr>
</tbody>
</table>

Panel gasket for square flange receptacle (thickness: 0.8 mm [.031])

P/n: JE19
**Remark:** we advise using our double shielded, reinforced Cat5E, Cat6, or Cat6A cables (see pages 41-42-43) 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 examples below).

For this type of solution please provide the configuration needed: length, description of second end…

**Example of assembled cordset:**

**IMPORTANT NOTE**

With these plugs, the standard RJ45 plug is not provided. Customer will have to crimp a standard RJ45 on the cable by himself.

**IMPORTANT NOTE**

With these receptacles, you will have to solder your own cable on the PCB. So the wire positions have to be defined according to your network.
RJF TV
Through bulkhead receptacles

Our RJFTV 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. They can be connected with RJFTV series plugs.

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 - ROHS compliant</td>
<td>No</td>
<td>RJF TV B 2 N ISO BRUT *</td>
</tr>
<tr>
<td></td>
<td>Nickel - ROHS compliant</td>
<td>Yes</td>
<td>RJF TV B 2 N ISO NI *</td>
</tr>
<tr>
<td></td>
<td>Olive drab cadmium</td>
<td>No</td>
<td>RJF TV B 2 G ISO BRUT *</td>
</tr>
<tr>
<td></td>
<td>Olive drab cadmium</td>
<td>Yes</td>
<td>RJF TV B 2 G ISO NI *</td>
</tr>
</tbody>
</table>

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

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 - ROHS compliant</td>
<td>No</td>
<td>RJF TV B 7 N ISO BRUT *</td>
</tr>
<tr>
<td></td>
<td>Nickel - ROHS compliant</td>
<td>Yes</td>
<td>RJF TV B 7 N ISO NI *</td>
</tr>
<tr>
<td></td>
<td>Olive drab cadmium</td>
<td>No</td>
<td>RJF TV B 7 G ISO BRUT *</td>
</tr>
<tr>
<td></td>
<td>Olive drab cadmium</td>
<td>Yes</td>
<td>RJF TV B 7 G ISO NI *</td>
</tr>
</tbody>
</table>

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

IMPORTANT NOTE
Possibility of other codings - Please consult us
These receptacles can be sold directly to your PCB. A compound insures a transversal sealing and good performance in high-vibration environments. The shell of those receptacles are in the “Stand Off” style. They can be connected with RJFTV series plugs.

Square flange receptacle

<table>
<thead>
<tr>
<th>Part number*</th>
<th>Plating available</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel - ROHS compliant</td>
<td>RJF TV 2S X SN F459</td>
<td></td>
</tr>
<tr>
<td>Olive drab cadmium</td>
<td>RJF TV 2S X SG F459</td>
<td></td>
</tr>
</tbody>
</table>

* new p/n - before it was RJFTV25GF459 or RJFTV25NF459

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

PCB LAYOUT
Solder face view

Panel drilling
Now available with same distance between flange and PCB than the 38999 stand off one. So you can use a 38999 stand off and a RJ45 stand off in the same implementation.

**NEW**

Part number: 36542  
Plating: olive drab cadmium

**Jam nut receptacle**

<table>
<thead>
<tr>
<th>Part number</th>
<th>Plating</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nickel - ROHS compliant</td>
<td>RJF TV 75 X 5N F459</td>
</tr>
<tr>
<td></td>
<td>Olive drab cadmium</td>
<td>RJF TV 75 X 5G F459</td>
</tr>
</tbody>
</table>

X to be replaced by the letter of the coding position you need (A, B, C, or D)
Now available with same distance between flange and PCB than the 38999 stand off one. So you can use a 38999 stand off and a RJ45 stand off in the same implementation.

Part number: 36540
Jam nut receptacle, olive drab cadmium plating.

PCB LAYOUT
Solder side view
**RJF TV**

Environmentally sealed receptacles, 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 examples below. This feature is available both in RJF and RJF TV shells (please consult the relevant data sheet for product details and accessories). In addition, the Sealed RJF TV has been successfully tested in very high vibration corresponding to airplane applications.

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

**Main characteristics**
- Same as the RJF and 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 and 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-26500 requirements.

**Data transmission**
- 10 BaseT, 100 BaseTX and 1000 BaseT networks
- Cat 5e per TIA/EIA 568B and ClassD per ISO/IEC 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**

<table>
<thead>
<tr>
<th>Series</th>
<th>RJF TV</th>
<th>Shell type</th>
<th>Coding</th>
<th>Back terminations</th>
<th>Shell material &amp; finish</th>
<th>Cordset length</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>RJFTV: MIL-DTL-38999 Series III</td>
<td>7S</td>
<td>A</td>
<td>2</td>
<td>G</td>
<td>03 100BTX</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Shell type</strong></td>
<td>2S: sealed square flange receptacle</td>
<td>7S: sealed jam nut receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Coding</strong></td>
<td>A,B,C,D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Back terminations</strong></td>
<td>1: female RJ45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1RA: right angle female RJ45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2: RJ45 Cordset</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Shell material &amp; finish</strong></td>
<td>N: aluminium shell - nickel plating - ROHS compliant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>G: aluminium shell - olive drab cadmium plating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BZ: marine bronze shell - ROHS compliant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cordset length</strong></td>
<td>Other lengths are available on demand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>03 100 BTX: 0.3m [11.81 inches]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>05 100 BTX: 0.5m [19.68 inches]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 100 BTX: 1m [39.37 inches]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 100 BTX: 1.5m [59.05 inches]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OPEN: open cable - with no plug at the end</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Remark**: cabling configuration: 100 BTX = 568B (Ethernet specification)

Examples:
- Series III, sealed jam nut receptacle, A coding, with female RJ45 back termination, olive drab cadmium plating: RJF TV 7SA 1 G
- Series III, sealed square flange receptacle, A coding, with female RJ45 back termination, nickel plating: RJF TV 2SA 1 N
- Series III, sealed jam nut receptacle, A coding, 1.5m [59.05"] 100 BTX cordset, olive drab cadmium plating: RJF TV 7SA 2 G15 100BTX
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 examples below. This feature is available both in RJF and RJF TV shells (please consult the relevant data sheet for product details and accessories). 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.

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

**Main characteristics**
- Same as the RJF and 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 and 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-26500 requirements.

**Data Transmission**
10 BaseT, 100 BaseTX and 1000 BaseT networks
Cat 5e per TIA/EIA 568B and Class D per ISO/IEC 11801

**Part number code**

<table>
<thead>
<tr>
<th>Series</th>
<th>RJF TV</th>
<th>7H</th>
<th>A</th>
<th>2</th>
<th>G</th>
<th>03 100BTX</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shell type</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2H: transversally sealed and hermetic square flange receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7H: transversally sealed and hermetic jam nut receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Coding</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Back terminations (for receptacles only)</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>1A: right angle female RJ45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2: RJ45 Cordset</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Shell material &amp; finish</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N: aluminium shell - nickel plating - ROHS compliant</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 - ROHS compliant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Note:</strong> receptacle inserts are metallized</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cordset length</strong> (for receptacles with &quot;2&quot; back termination only) - Other lengths are available on demand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>03 100 BTX: 0.3m [11.81 inches]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>05 100 BTX: 0.5m [19.68 inches]</td>
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<tr>
<td>10 100 BTX: 1m [39.37 inches]</td>
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<tr>
<td>15 100 BTX: 1.5m [59.05 inches]</td>
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<td>OPEN: open cable - with no plug at the end</td>
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<tr>
<td><strong>Remark:</strong> cabling configuration: 100 BTX = 568B (Ethernet specification)</td>
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**Examples:**
- Series III, sealed jam nut receptacle, A coding, with female RJ45 Back termination, olive drab cadmium plating: RJF TV 7HA 1 G
- Series III, sealed square flange receptacle, A coding, with female RJ45 back termination, nickel plating: RJF TV 2HA 1 N
- Series III, sealed jam nut receptacle, A coding, 1.5m [59.05"] 100 BTX cordset, olive drab cadmium plating: RJF TV 7HA 2 G15 100BTX

**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.

**Example:**
RJFTV 2H A2 N 15 100BTX
**RJF TV**

For big insulation wire up to 1.6 mm

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

**Remark:**
- compatible with any RJF TV receptacle
- for cables which are not compatible with standard RJ45 plug

**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 min
- 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 networks
- Cat 5e per TIA/EIA 568B and ClassD per ISO/IEC 11801

**Environmental protection**
- Sealing: IP68
- Salt spray: 48 h with nickel plating
  - > 96 h with black coating
  - > 500 h with olive drab cadmium
- Fire retardant/Low smoke: UL94 V0 and NF F 16 101 & 16 102
- Vibration: 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
- Thermal shock: 5 cycles at - 40°C / +100°C
- Temperature range: - 40°C / +85°C

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**Part number**

<table>
<thead>
<tr>
<th>Plating</th>
<th>P/N</th>
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<tbody>
<tr>
<td>Nickel - ROHS compliant</td>
<td>35660</td>
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<tr>
<td>Olive drab cadmium</td>
<td>35660G</td>
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</tbody>
</table>