



RJF TV

Ethernet Connection System for Harsh Environment



RJF TV 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!

Applications

- Data Acquisition and Transmission in harsh environment
- Railways
- Radars
- Shelters
- Battlefield Communication
- Systems
- Navy

Data Transmission

10 BaseT, 100 BaseTX and 1000 BaseT networks
 Cat 5e per TIA/EIA 568B and ClassD per ISO/IEC 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**
- **Robust metallic shells**
- RJ45 cordset retention in the plug: 100 N in the axis
- Mating cycles: 500 min
- Compatible with cable diameter from 5,5 mm [0.216 in] to 13 mm [0.512 in]

Environmental Protection

- Sealing: IP68
- Salt Spray: 48 h with Aluminium shell - Nickel plating
 > 500 h with Aluminium shell - Olive Drab Cadmium plating
 1000h 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

| | | | | | |
|--|---|---|---|---|------------|
| Series | RJF TV | 2 | 2 | G | 03 100 BTX |
| RJ Field TV | | | | | |
| 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 | | | | |
| 2SA, 7SA: | Transversally sealed receptacle (unmated) see page 22 | | | | |
| 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 | | | | |
| Cordset Length (type 2 back termination only) | | | | | |
| 03 100 BTX: | 0.3m [11.81 inches] | | | | |
| 05 100 BTX: | 0.5m 19.68 inches] | | | | |
| 10 100 BTX: | 1m [39.37 inches] | | | | |
| 15 100 BTX: | 1.5m [59.05 inches] | | | | |
| 00: | 8 tinned holes at the rear of the PCB to solder the cable | | | | |

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

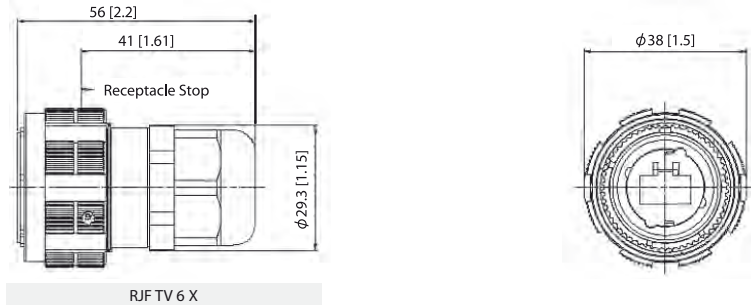
- Examples:
- Olive Drab Cadmium plug with plastic gland: RJF TV 6G
 - Olive Drab Cadmium Jam Nut Receptacle, female RJ45 back termination: RJF TV 71G
 - Nickel Jam Nut Receptacle, 1,5 m 100 BTX cordset back termination: RJF TV 72N 15 100BTX
 - Olive Drab Cadmium in line Square Flange Recept., 0,3 m 100 BTX cordset back termination: RJF TV 2PE 2 G 03 100BTX
 - Nickel Jam Nut Receptacle Solder termination 8 tinned holes: RJF TV 22 N 00

RJF TV

Amphenol

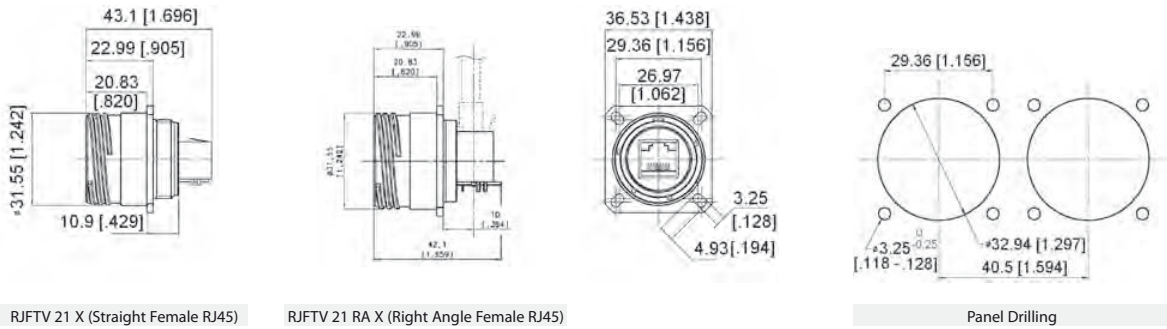
Plug:

- Shell type 6 with Plastic or Metal Gland

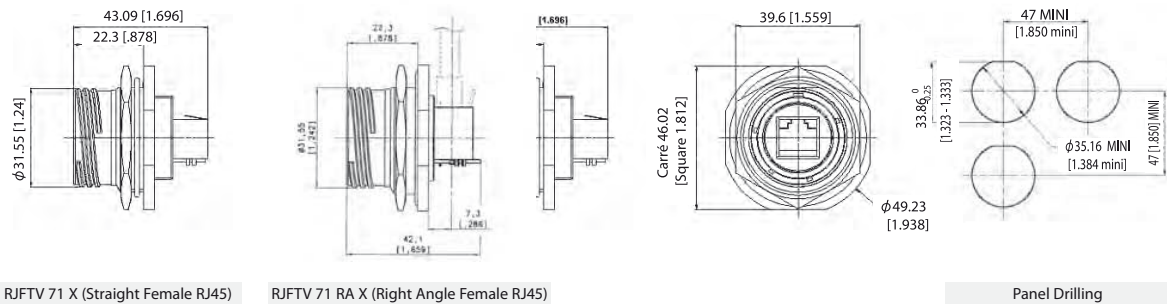


Receptacles:

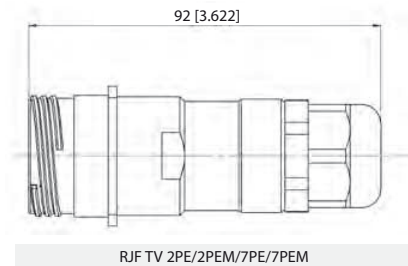
- Square flange receptacle • 4 mounting holes: Shell type 2



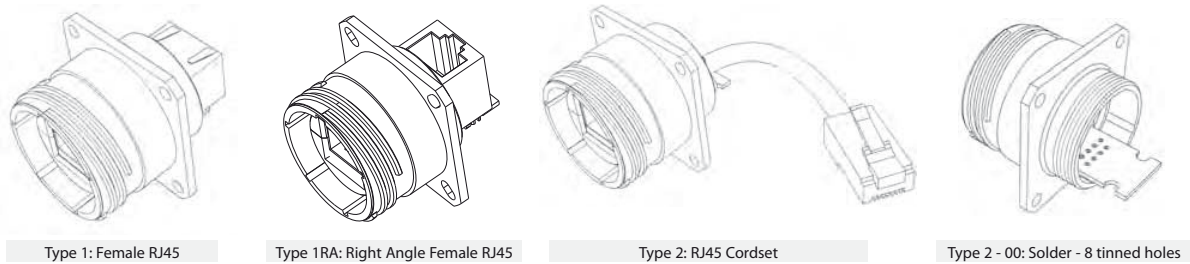
- Jam nut receptacle • Hexagonal Nut mounting: Shell type 7



- Receptacles with IP68 backshell • Shell type 2PE and 7PE with Plastic or Metal Gland



Back Terminations

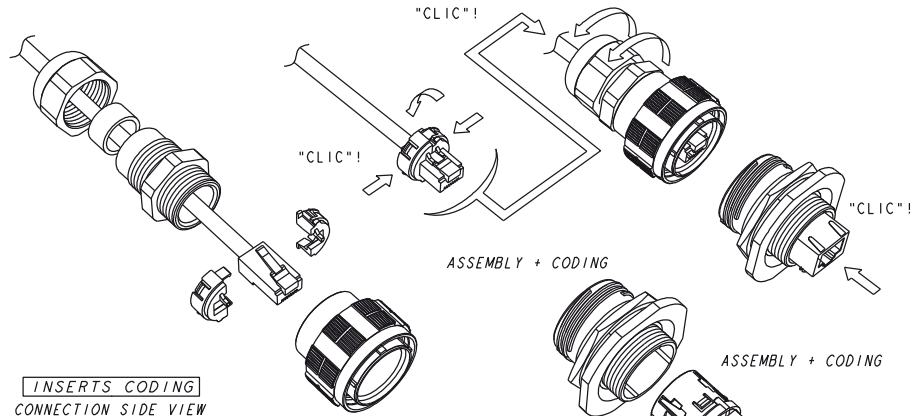


Notes Type 2 without RJ45 plug at the end of the cable is also available: consult factory

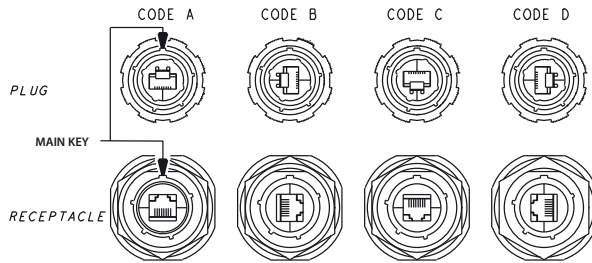
Assembly instructions

Insert Codings

CONNECTION SIDE VIEW



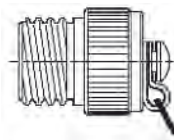
INSERTS CODING
CONNECTION SIDE VIEW



Accessories

■ Metallic Caps

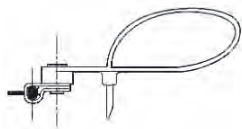
| | | | |
|------------------------------------|---|---|---|
| | RJFTVC | 2 | G |
| Connector Type | | | |
| 6: | Plug | | |
| 2: | Square Flange Receptacle | | |
| 7: | Jam Nut Receptacle | | |
| Shell Material & finish | | | |
| N: | Aluminium shell - nickel plating - ROHS compliant | | |
| G: | Aluminium shell - olive drab cadmium plating | | |
| BZ: | Marine bronze shell - ROHS compliant | | |



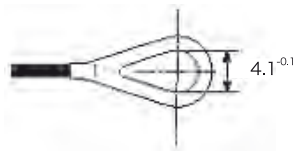
Plug Cap



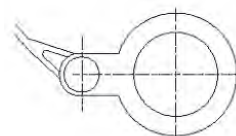
Receptacle Cap



Plug Cap end



Square flange receptacle cap end



Jam Nut receptacle cap end

- Panel Gasket for square flange receptacle
(Thickness: 0,8 mm [.031]): JE19



- Insert removal tool: RJF ODE





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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