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

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



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USBF TV

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 below. In addition, the Sealed USBF TV has been successfully tested in very high vibration corresponding to airplane applications.

Applications

- Embedded Computers
- Data Acquisition and transmission in harsh environment
- Railways
- Battelfield Communication Systems
- Navy Systems

Data Transmission

USB Specification 2.0
Data Rate: Up to 480 Mb/s for High Speed USB

Main characteristics

- Sealed against fluids and dusts (IP68)
- Shock, Vibration and Traction resistant
- No cabling operation in field and no tools required
- Improved EMI protection
- Tri Start Thread coupling mechanism (MIL-DTL-38999 series III type) with anti-decoupling device
- 2 mechanical Coding / Polarization possibilities by the user (receptacle insert rotation)
- USBF TV plug retention in the receptacle: 100 N in the axis
- Mating cycles: 500 minimum

Environmental Protection

- Sealing (when mated): IP68 (Temporary immersion)
- Salt Spray: 48 h with Nickel plating
> 500 h with Olive Drab Cadmium
1000 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 > 1 micro 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

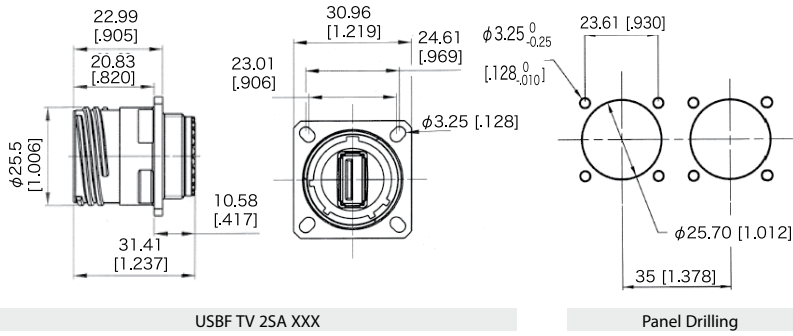
Part Number Code

Series	USBF TV	2PES	A	2	N	03	A
USB Field TV							
Shell Type							
2S: Square flange receptacle							
2PES: Square flange receptacle + backshell + plastic gland							
2PEMS: Square flange receptacle + backshell + metal gland							
7S: Jam nut receptacle							
7PES: Jam nut receptacle + backshell + plastic gland							
7PEMS: Jam nut receptacle + backshell + metal gland							
Coding							
"A" (Standard) or "B"							
Back Terminations							
2: Rugged USB cable (see corresponding datasheet page 94)							
Shells Plating							
N: Nickel							
G: Olive drab cadmium plating							
USB cable length							
03: 30 cm [11.81 inches]							
05: 50 cm [19.68 inches]							
10: 1 meter [39.37 inches]							
USB cable end							
A: Standard USB-A plug							
OPEN: Open cable (no connector)							

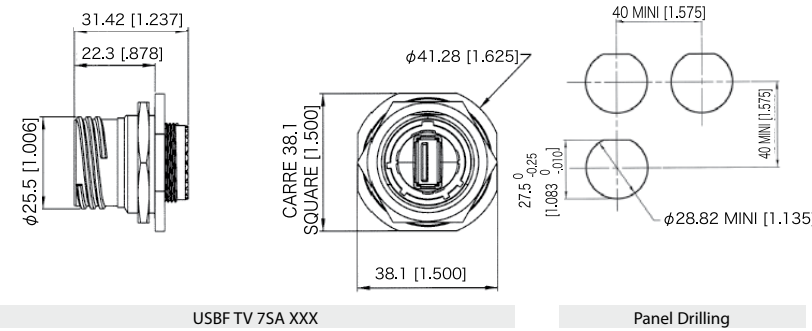
- Examples:
- Olive Drab Cadmium Square Flange Receptacle with 30 cm of USB cable and standard USB-A plug: USBF TV 2S G 03 A
 - Nickel Jam Nut Receptacle + backshell + plastic gland, with 1 meter of USB cable, and a standard USB-A plug: USBF TV 7PES N10 A

Receptacles

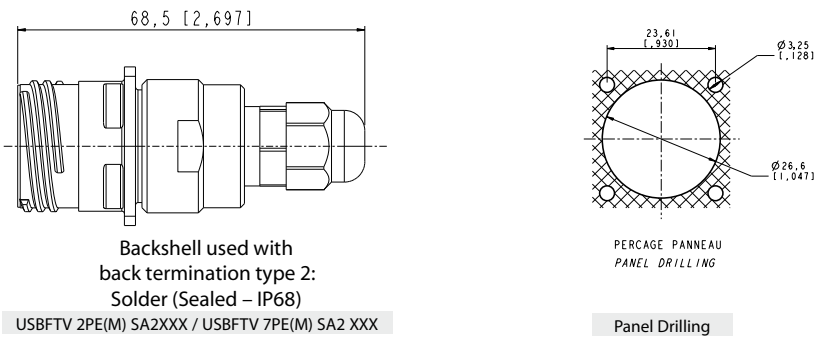
- Square flange receptacle 4 mounting holes: Shell type 2



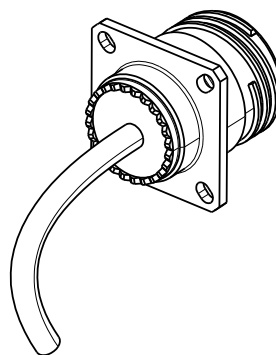
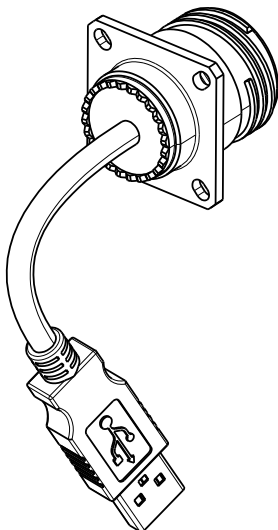
- Jam nut receptacle Hexagonal Nut mounting: Shell type 7



- Jam nut receptacle Hexagonal Nut mounting: Shell type 7



Cordset End





USBF TV

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. Helium leakage is less than 1.10^{-6} cm³ per second [0.1 micron cubit ft per hour] at one bar [15 psi] pressure differential.

Applications

- Embedded Computers
- Data Acquisition and transmission in harsh environment
- Railways
- Battelfield Communication Systems
- Navy Systems

Data Transmission

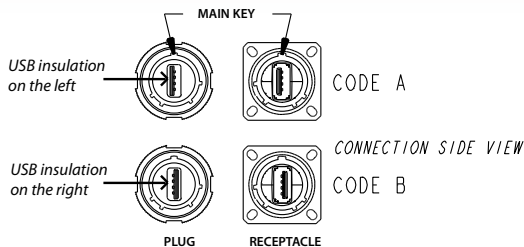
USB Specification 2.0
Data Rate: up to 480 Mb/s for High Speed USB

Main characteristics

- Same as the USBF TV (see page 76)... a complete IP68 sealing of the receptacle is added (even with no plug or no protective cap mated).
- Outside dimensions are the same as the standard USBF TV (USB-A).
- Vibrations : the compounded version of the USBF TV has 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.

IMPORTANT NOTE

Due to the compound, the coding of the connector must be done in the factory: use the codes A or B in the part number. **Example:** USBFTV 2H **A** 2 N 03 A



Part Number Code

Series	USBF TV	2H	A	2	N	03	A
USB Field TV							
Shell Type							
2H :	Hermetic square flange receptacle						
2PEH:	Hermetic square flange receptacle + backshell + plastic gland						
2PEMH:	Hermetic square flange receptacle + backshell + metal gland						
7H:	Hermetic jam nut receptacle						
7PEH:	Hermetic jam nut receptacle + backshell + plastic gland						
7PEMH:	Hermetic jam nut receptacle + backshell + metal gland						
Coding							
"A" (Standard) or "B"							
Back Terminations							
2:	Rugged USB cable (see corresponding datasheet page 94)						
Shells Plating							
N:	Nickel						
G:	Olive drab cadmium plating						
USB cable length							
03:	30 cm [11.81 inches]						
05:	50 cm [19.68 inches]						
10:	1 meter [39.37 inches]						
USB cable end							
A:	Standard USB-A plug						
OPEN:	Open cable (no connector)						

Examples: - Olive Drab Cadmium Hermetic Square Flange Receptacle with 30 cm of USB cable and standard USB-A plug: USBF TV 2H G 03 A
- Nickel Hermetic Jam Nut Receptacle + backshell + plastic gland, with 1 meter of USB cable, and a standard USB-A plug: USBF TV 7PEH N10 A