

USBBF TV (USB-B)

USB Connection System for Harsh Environment



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

USB Field allows you to use a standard USB 2.0 connection in harsh environment:

- 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
- Plug retention in the receptacle: 100N in the axis
- Mating cycles: 500 minimum

Back terminations available:

- a USB-A receptacle
- solder: 4 tinned holes on the PCB to solder your wire

Temperature range: -40°C/+85°C

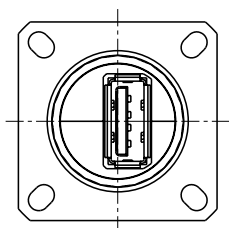
Part Number Code

Series	USBBF TV	2	1	G
USBB Field TV				
Shell Type				
6:	Plug			
2:	Square flange receptacle			
2PE:	Square flange receptacle with metal backshell (type 1) & with metal backshell + plastic gland (type 2)			
2PEM:	Square flange receptacle metal gland (only for soldering back termination type 2)			
7:	Jam nut receptacle			
7PE:	Jam nut receptacle with metal backshell (type 1) & with metal backshell + plastic gland (type 2)			
7PEM:	Jam nut receptacle metal gland (only for soldering back termination type 2)			
Back Terminations (Receptacles only)				
1:	Female USB-A			
2:	Solder (4 tinned holes)			
Shells Material & Finish				
N:	Aluminium shell - Nickel plating - ROHS compliant			
G:	Aluminium shell - Olive Drab Cadmium plating			

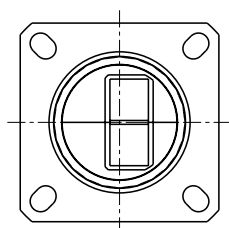
Examples:

- Plug-cadmium plating: USBBF TV 6G
- Square Flange Receptacle-USB-A back termination-cadmium plating: USBBF TV 21G
- JamNut Receptacle, solder termination-nickel plating: USBBF TV 72N

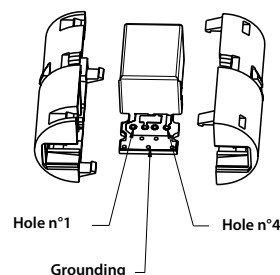
Back terminations



Type 1: Female USB-A

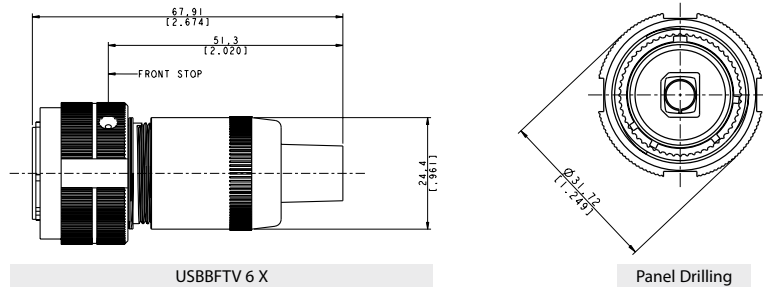


Type 2: Solder (4 tinned holes)



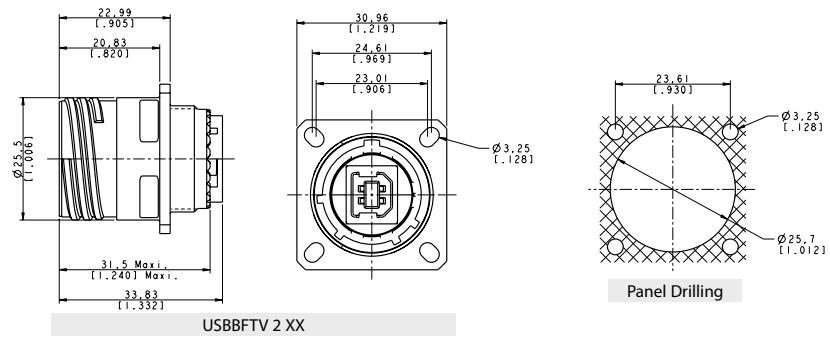
Plug

■ Shell type 6

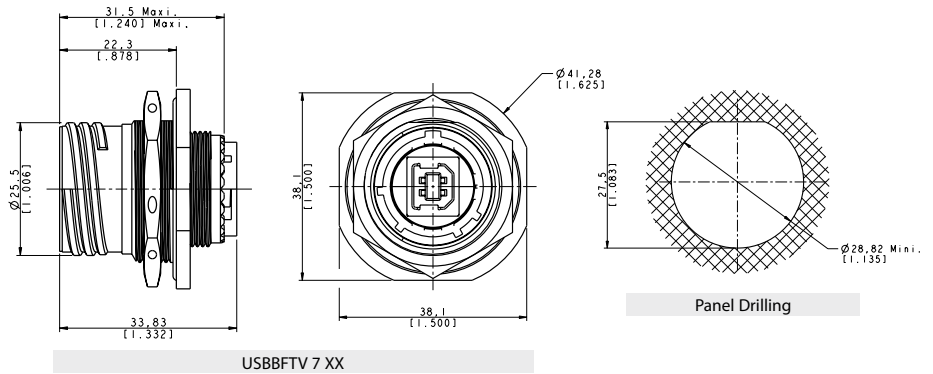


Receptacles

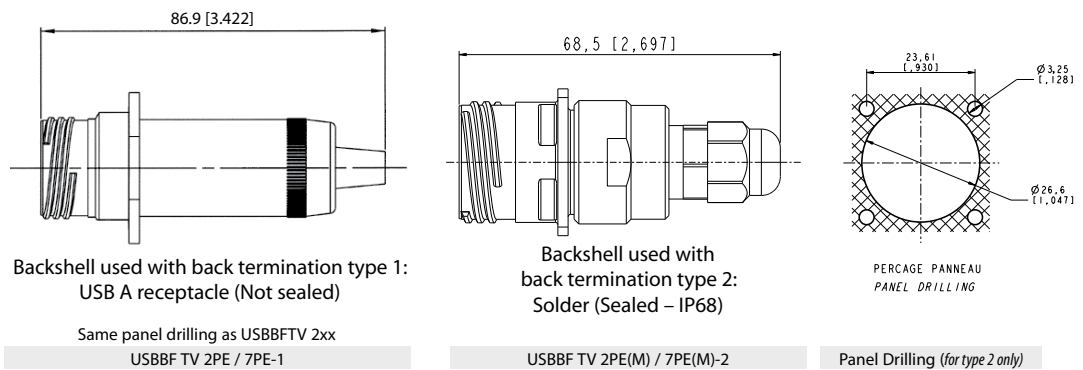
■ Shell type 2 - Square flange receptacle



■ Shell type 7 - Jam nut receptacle



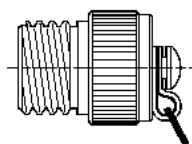
■ «2PEM» and «7PEM» Shells with Backshell to protect Back termination from dust, shocks and vibration.



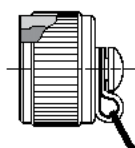
Accessories

■ Metallic Caps (same as USB-A version - see page 74)

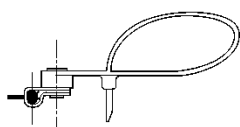
	USBF TVC	2	G
Connector Type			
6:	Plug		
2:	Square Flange Receptacle		
7:	Jam Nut Receptacle		
Shells Material & Finish			
N:	Nickel plating - ROHS compliant		
G:	Olive Drab Cadmium plating		



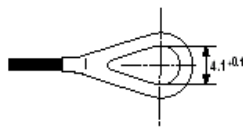
Plug Cap



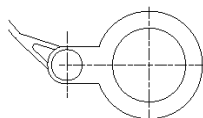
Receptacle Cap



Plug Cap end



Square flange
receptacle cap end



Jam Nut receptacle
cap end

■ Panel Gasket for square flange receptacle (Thickness: 0,8 mm [.031]): JE15

