



Rugged ATEX Zone 2 solutions



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RJFTVX, USBFTVX, RJ11FTVX

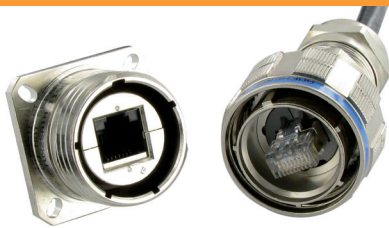
RJ45, USB, RJ11/12 explosion proof solutions for **Zone 2**



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.

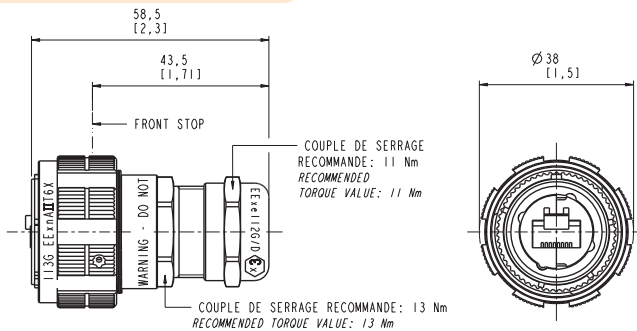


RJFTVX • Rugged and sealed RJ45 connector



RJFTVX allows you to use an Ethernet Class D / Cat. 5e connection for 10 BaseT, 100 BaseTx or 1000 BaseT networks 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. RJFTVX features the same main characteristics than RJFTV series (see page 26).

Plug

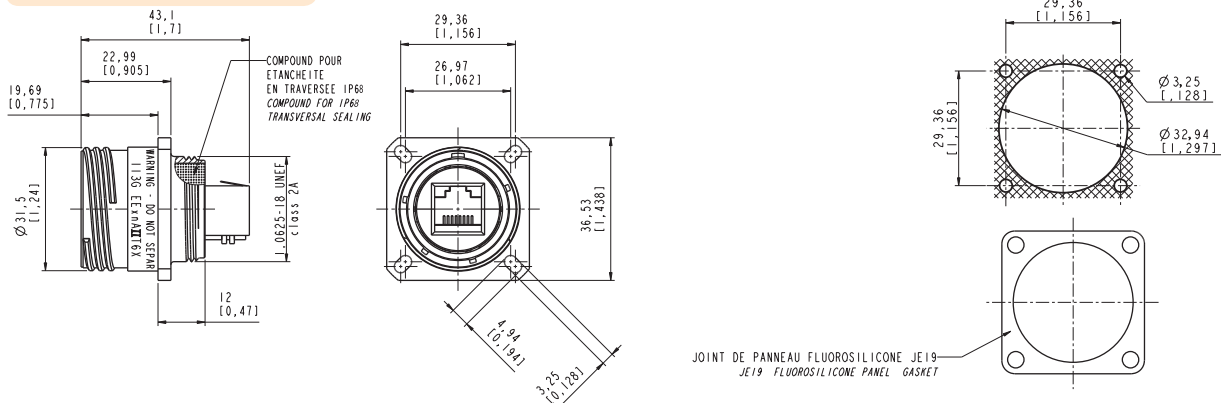


Characteristics

- Ex marking: IIG ExnAII T6 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 networks. Cat. 5e per TIA/EIA 568B & Class D per ISO/IEC 11801

Part number	Plating	Plug	IP68 metallic cap
	Nickel	RJFTVX6MN	RJFTVC6N
	Olive drab cadmium	RJFTVX6MG	RJFTVC6G
	Black Zinc Nickel	RJFTVX6MZN	RJFTVC6ZN

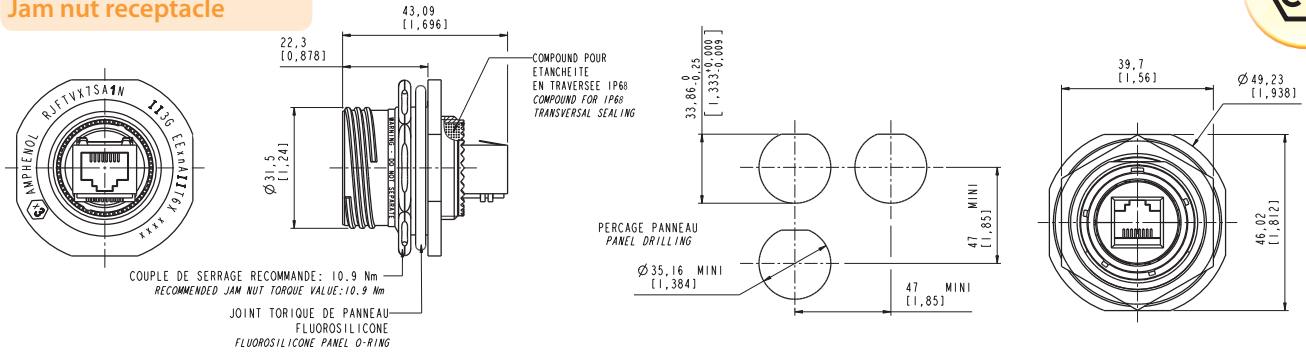
Square flange receptacle



Part number	Plating	Receptacle, RJ45 back termination, coding A	IP68 metallic cap
	Nickel	RJFTVX2SA1N	RJFTVC2N
	Olive drab cadmium	RJFTVX2SA1G	RJFTVC2G
	Black Zinc Nickel	RJFTVX2SA1ZN	RJFTVC2ZN



Jam nut receptacle

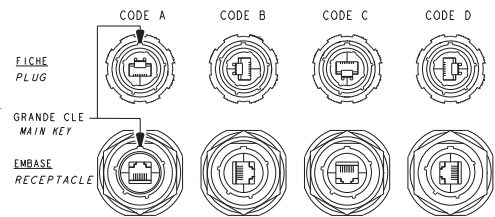


Part number	Plating	Receptacle, RJ45 back termination, coding A	IP68 metallic cap
	Nickel		RJFTVX7SA1N
Olive drab cadmium		RJFTVX7SA1G	RJFTVC7G
Black Zinc Nickel		RJFTVX7SA1ZN	RJFTVC7ZN

REMARK: As receptacles are compounded (IP68 transversally sealing), coding position has to be specified in the part number : A (standard), B, C or D

Receptacles can be provided with RJ45 cordsets.

There are 4 standard lengths as described hereunder (with coding "A"):

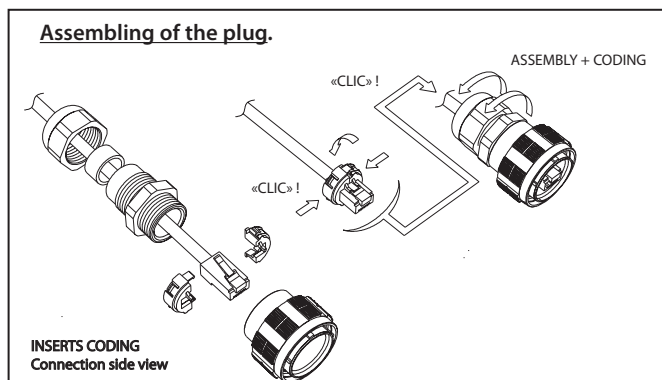


Part number	Nickel plating	Olive drab cadmium plating	Black Zinc Nickel plating	RJ45 cordset length (meters)
	RJFTVX2SA2N03100BTX	RJFTVX2SA2G03100BTX	RJFTVX2SA2ZN03100BTX	0.3
RJFTVX2SA2N05100BTX	RJFTVX2SA2G05100BTX	RJFTVX2SA2ZN05100BTX	0.5	
RJFTVX2SA2N10100BTX	RJFTVX2SA2G10100BTX	RJFTVX2SA2ZN10100BTX	1.0	
RJFTVX2SA2N15100BTX	RJFTVX2SA2G15100BTX	RJFTVX2SA2ZN15100BTX	1.5	

Part number code

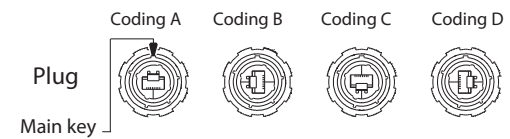
Series RJ Field TV	RJFTVX	75	A	2	N	05 100BTX
Shell Type						
2S: Square flange receptacle						
7S: Jam nut receptacle						
6M: Plug						
Coding (for receptacles only)						
"A" (Standard) or "B", "C", "D"						
Back Terminations (for receptacles only)						
1: Female RJ45						
2: RJ45 cordset						
Shell Material and Finish:						
N: Nickel						
G: Olive drab cadmium						
ZN: Black Zinc Nickel						
Cordset length (for receptacles with "2" back termination only)						
03 100BTX: 30 cm [11.81 inches]						
10 100 BTX: 1 meter [39.37 inches]						
05 100 BTX: 50 cm [19.68 inches]						
15 100BTX: 1,5 meters [59.04 inches]						

Assembly instructions for 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





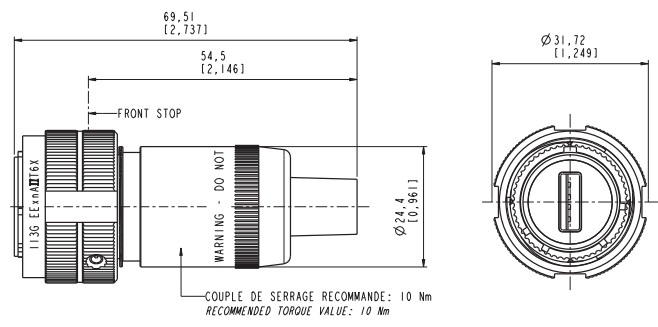
USBFTVX • Rugged and sealed USB connector



With USBFTVX, you can insert a standard USB 2.0 cordset into a metallic plug which will protect it from shocks, dust and fluids. This range is fitted to be used in Atex zone 2 environments. This metallic plug is connected into a receptacle, using a Tri Start thread coupling mechanism (MIL-DTL-38999 series III type) with anti-decoupling device for high vibrations. USBFTVX features the same main characteristics than USBFTV series (see page 76).

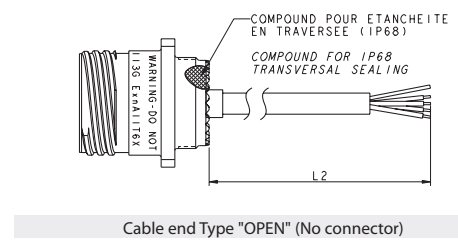
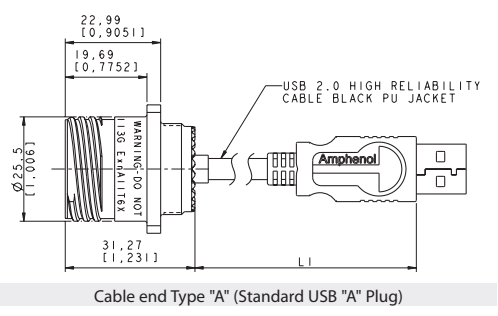
Characteristics			
■ Ex marking	IIG ExnAII6 X	■ Outside cable diameter	4mm to 6mm
■ Operating temperature range	-40°C / +70°C	■ Sealing	IP68
■ Voltage	60 Veff max	■ Data transmission	USB 2.0 up to 480 Mb/s
■ Power	20 W max		

Plug

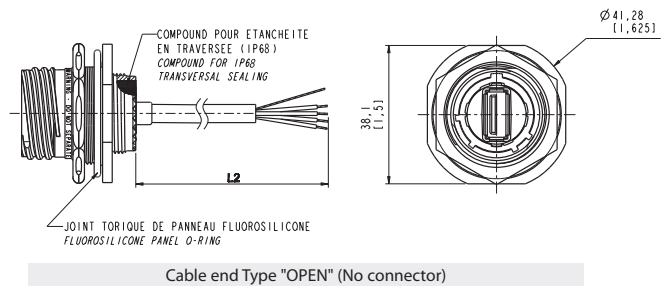
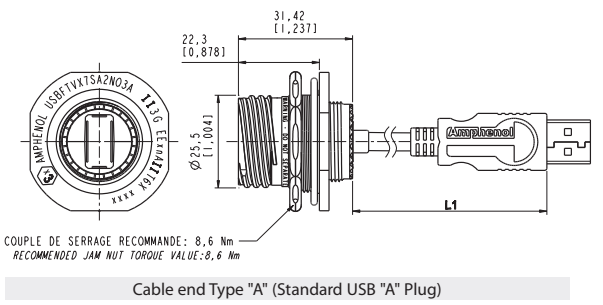


Part number	Plating	Plug	IP68 metallic cap
	Nickel	USBFTVX6N	USBFTVC6N
	Olive drab cadmium	USBFTVX6G	USBFTVC6G
	Black Zinc Nickel	USBFTVX6ZN	USBFTVC6ZN

Square flange receptacle

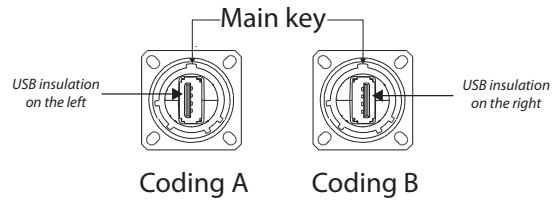


Jam nut receptacle



REMARK: as the receptacles are compounded (IP68 transversally sealing), the coding position has to be specified in the part number: **A** (standard), or **B**

Connection side view of the receptacle



Part number code

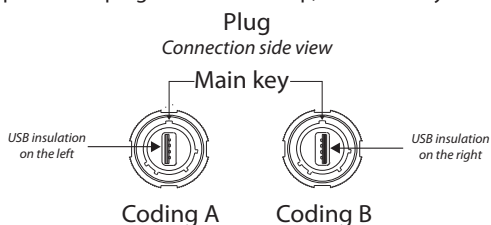
Series USB Field TV	USBFTVX	25	A	2	N	03	A
Shell Type							
25: square flange receptacle							
75: jam nut receptacle							
Coding: "A" (Standard) or "B"							
Back Terminations							
2: rugged USB cable							
Shells Plating							
N: Nickel							
G: Olive drab cadmium plating							
USB cable 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)							

CAPS for receptacles :

Part number	Plating	Cap for square flange receptacle	Cap for jam nut receptacle
	Nickel		USBFTVC2N
Olive drab cadmium		USBFTVC2G	USBFTVC7G
Black Zinc Nickel		USBFTVC2ZN	USBFTVC7ZN

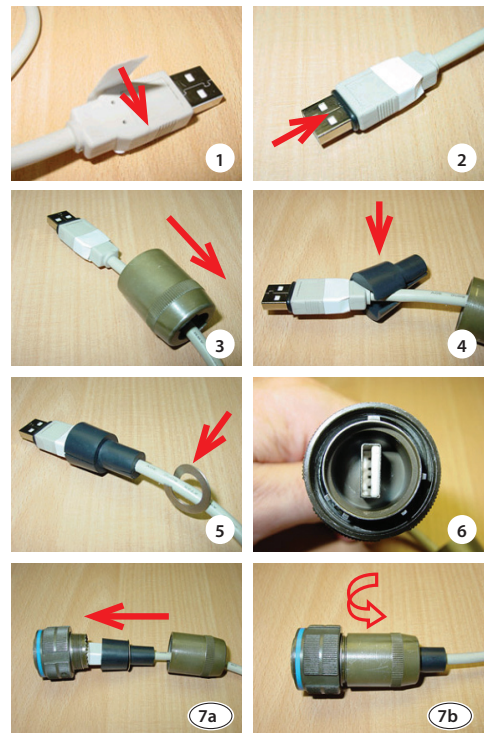
Assembly instructions of the plug

1. Only if you need a full sealing (IP68): Install the white sticker around the plug, covering the 4 little holes of the overmolding
2. Insert the black O Ring around the front face of the USB A plug. This O Ring will ensure connection sealing
3. Insert the USB cordset into the metallic backshell
4. Insert the retention spacer laterally to the cable (this spacer is soft, in order to adapt to different shapes of overmolding) and slide the overmolding of the USB-A plug into this retention spacer
5. Insert the friction ring laterally to the cable
6. Choose the right coding (2 positions) and insert the USB-A plug into the protective plug. Note at this step, the main key is used for polarization.



7. Screw the backshell on the plug body. A wrench can be necessary to fully tighten it, and the connection to the receptacle can help.

IMPORTANT NOTE
The connection sealing is not done by the black retention spacer (which is slotted), but by the front face ORing (fig.2)



IMPORTANT NOTE
To remove the insert use the insert removal tool for plug.
P/N: **USBF ODE**



RJ11FTVX • Rugged and sealed RJ11/12 connector

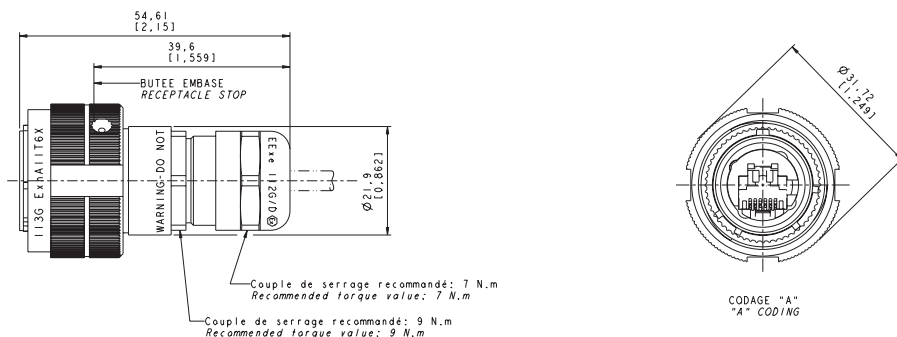


RJ11FTVX allows you to use a standard phone RJ11/RJ12 connection in Atex zone 2 environments. With the patented RJStop® system you can use a standard RJ11 / RJ12 cordset in a metallic plug which will protect it from shocks, dust and fluids.

Characteristics

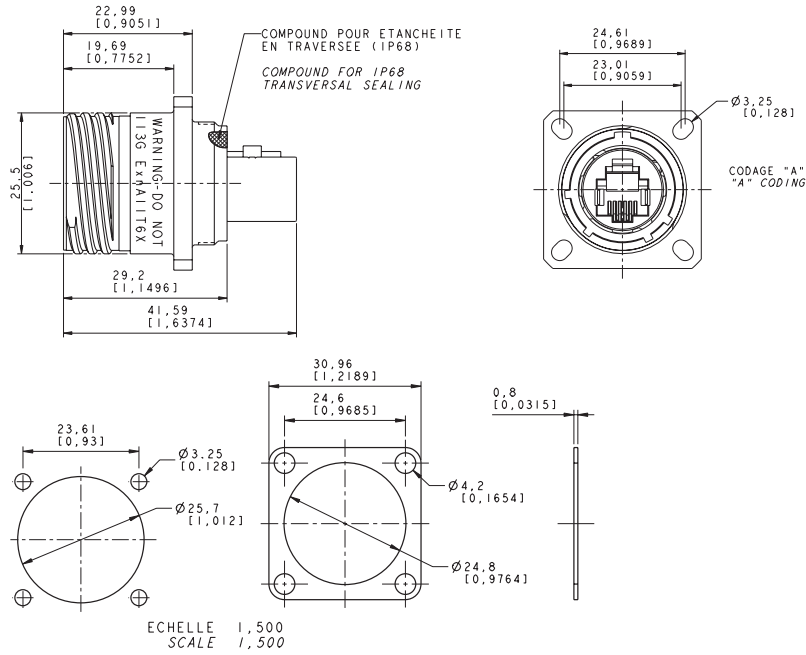
■ Ex marking	II3G ExnAIIIT6 X
■ Operating temperature range	-40°C / +60°C
■ Voltage	60 Veff max
■ Power	20 W max
■ Outside cable diameter	4mm to 5.5mm
■ Sealing	IP68
■ Coupling mechanism	Tri Star thread with anti-decoupling device (MIL-DTL-38999 series III)
■ Mating cycles	500 min
■ Salt spray	48h with nickel plating / 500 h with olive drab cadmium plating
■ Coding	4 mechanical user-defined coding / Polarization settings (insert rotation)
■ Fire retardant / Low smoke	UL94 V0 and NF16 101 & 16 102
■ R11 cordset retention in the plug	100 N in the Axis

Plug



Part number	Plating	Plug	Cap
	Nickel	RJ11FTVX6MN	RJ11FTVC6N
	Olive drab cadmium	RJ11FTVX6MG	RJ11FTVC6G
	Black Zinc Nickel	RJ11FTVX6MZN	RJ11FTVC6ZN

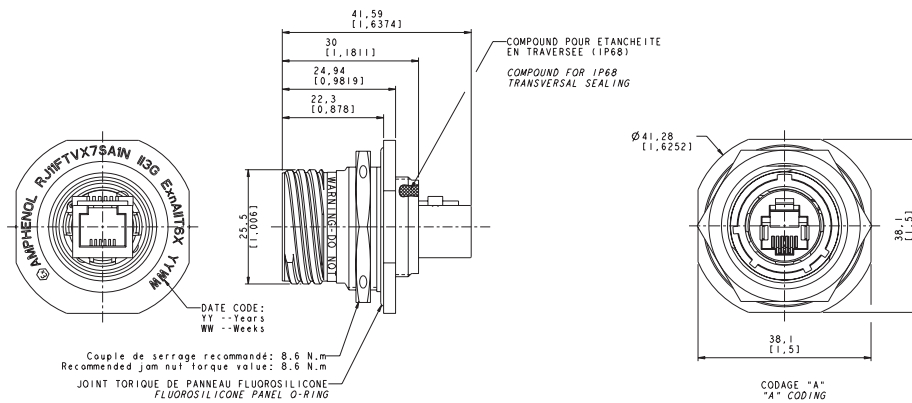
Square flange receptacle



PERCAGES PANNEAU PANEL DRILLING JOINT DE PANNEAU FLUOR SILICONE JE15 JE15 FLUOROSILICONE PANEL GASKET

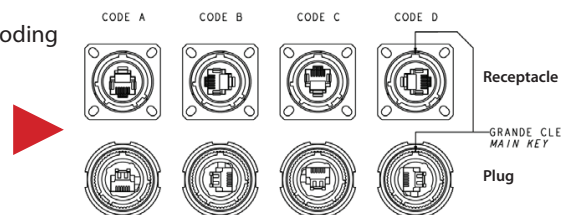
Part number	Plating	Receptacle - Female RJ11 back termination - Coding A	Receptacle cap
	Nickel	RJ11FTVX2SA1N	RJ11FTVC2N
	Olive drab cadmium	RJ11FTVX2SA1G	RJ11FTVC2G
	Black Zinc Nickel	RJ11FTVX2SA1ZN	RJ11FTVC2ZN

Jam nut receptacle



Part number	Plating	Receptacle - Female RJ11 back termination - Coding A	Receptacle cap
	Nickel	RJ11FTVX7SA1N	RJ11FTVC7N
	Olive drab cadmium	RJ11FTVX7SA1G	RJ11FTVC7G
	Black Zinc Nickel	RJ11FTVX7SA1ZN	RJ11FTVC7ZN

REMARK: As receptacles are compounded (IP68 transversally sealing), coding position has to be specified in the part number : A (standard), B, C or D (connection side views)



NOTES

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