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

Part number	Plating	Plug	IP68 metallic cap
	Nickel	**RJFTVX6MN**	**RJFTVC6N**
	Olive drab cadmium	**RJFTVX6MG**	**RJFTVC6G**

Characteristics

■	Ex marking	II3G ExnAIIT6 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

Square flange receptacle
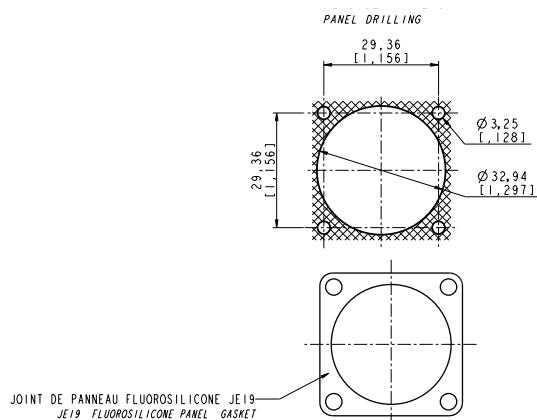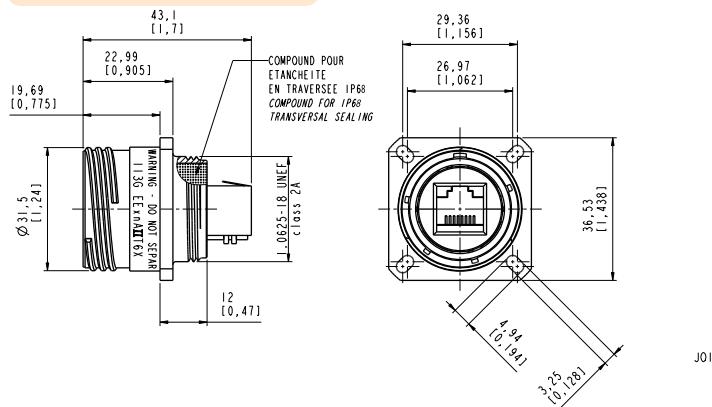
Part number	Plating	Receptacle, RJ45 back termination, coding A	Receptacle cap
	Nickel	**RJFTVX2SA1N**	**RJFTVC2N**
	Olive drab cadmium	**RJFTVX2SA1G**	**RJFTVC2G**

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Jam nut receptacle

COUPLE DE SERRAGE RECOMMANDE: 10.9 Nm
RECOMMENDED JAM NUT TORQUE VALUE:10.9 Nm

COMPOUND POUR ETANCHEITE EN TRAVERSEE IP68
COMPOUND FOR IP68 TRANSVERSAL SEALING

JOINT TORIQUE DE PANNEAU FLUOROSILICONE
FLUOROSILICONE PANEL O-RING

PERCAGE PANNEAU
PANEL DRILLING
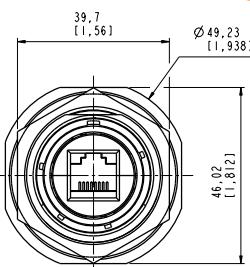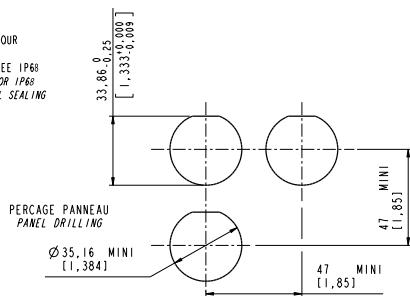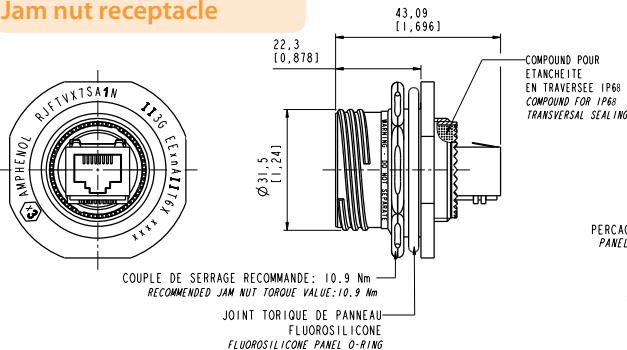
Part number	Plating	Receptacle, RJ45 back termination, coding A	IP68 metallic cap
	Nickel	**RJFTVX7SA1N**	**RJFTVC7N**
	Olive drab cadmium	**RJFTVX7SA1G**	**RJFTVC7G**

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

CODE A CODE B CODE C CODE D

FICHE *PLUG*

GRANDE CLE *MAIN KEY*

EMBASE *RECEPTACLE*
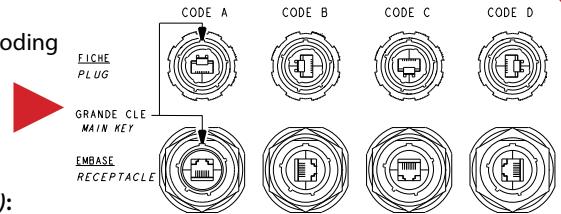
Receptacles can be provided with RJ45 cordsets.
There are 4 standard lengths as described hereunder *(with coding "A")*:

Part number	Nickel plating	Olive drab cadmium plating	RJ45 cordset length *Meters*
	RJFTVX2SA2**N**03100BTX	RJFTVX2SA2**G**03100BTX	0.3
	RJFTVX2SA2**N**05100BTX	RJFTVX2SA2**G**05100BTX	0.5
	RJFTVX2SA2**N**10100BTX	RJFTVX2SA2**G**10100BTX	1.0
	RJFTVX2SA2**N**15100BTX	RJFTVX2SA2**G**15100BTX	1.5

Part number code

|						
Series RJ Field TV	RJF TVX	7S	A	2	N	05 100BTX
Shell Type **2S:** Square flange receptacle **7S:** Jam nut receptacle **6M:** Plug						
Coding "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						
Cordset length (for receptacles with "2" back termination only) **03 100BTX:**30 cm [11.81 inches] **05 100 BTX:**50 cm [19.68 inches] **10 100 BTX:**1 meter [39.37 inches] **15 100BTX:** 1,5 meters [59.04 inches]						

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   II3G ExnAIIT6 X
- Operating temperature range   -40°C / +70°C
- Voltage   60 Veff max
- Power   20 W max
- Outside cable diameter   4mm to 6mm
- Sealing   IP68
- Data transmission   USB 2.0 up to 480 Mb/s

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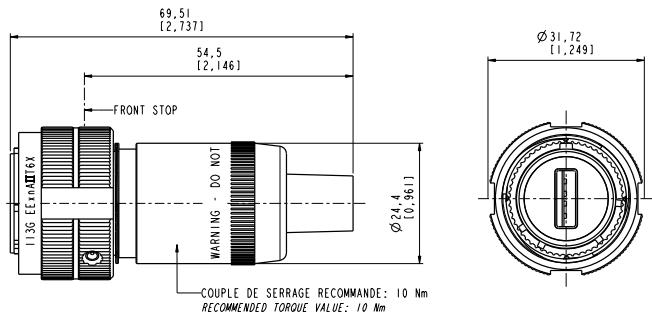
Plug

Part number	Plating	Plug	IP68 metallic cap
	Nickel	**USBFTVX6N**	**USBFTVC6N**
	Olive drab cadmium	**USBFTVX6G**	**USBFTVC6G**
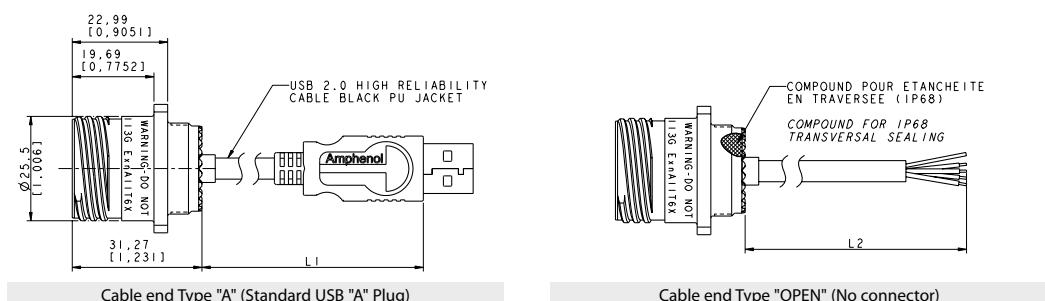
Square flange receptacle

Cable end Type "A" (Standard USB "A" Plug)

Cable end Type "OPEN" (No connector)

31,42
[1,237]

22,3
[0,878]

Ø25,5
[1,004]

COUPLE DE SERRAGE RECOMMANDE: 8,6 Nm
RECOMMENDED JAM NUT TORQUE VALUE:8,6 Nm

L1

COMPOUND POUR ETANCHEITE
EN TRAVERSEE (IP68)
*COMPOUND FOR IP68
TRANSVERSAL SEALING*

JOINT TORIQUE DE PANNEAU FLUOROSILICONE
FLUOROSILICONE PANEL O-RING

L2

Ø41,28
[1,625]

38,1
[1,5]
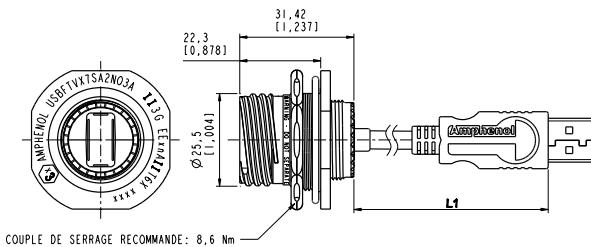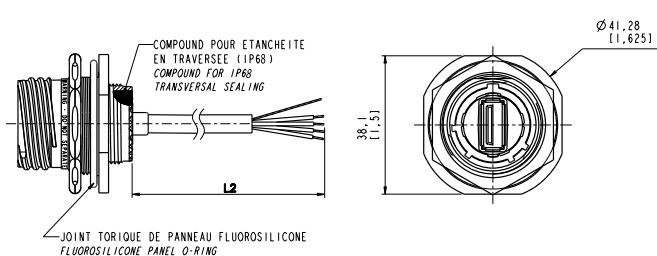
| Cable end Type "A" (Standard USB "A" Plug) | Cable end Type "OPEN" (No connector) |

Part number code

Series USB Field TV	USBF TVX	2S	A	2	N	03	A
Shell Type **2S :** Square flange receptacle **7S:** 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**	**USBFTVC7N**
	Olive drab cadmium	**USBFTVC2G**	**USBFTVC7G**

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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 ExnAIIT6 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 oliv 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
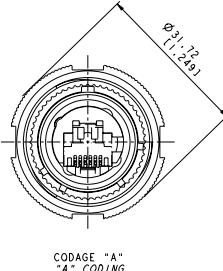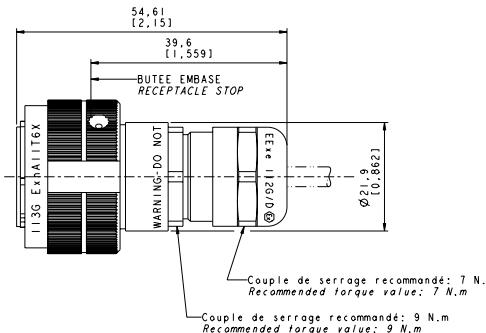
Part number	Plating	Plug	Cap
	Nickel	**RJ11FTVX6MN**	**RJ11FTVC6N**
	Olive drab cadmium	**RJ11FTVX6MG**	**RJ11FTVC6G**