

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.

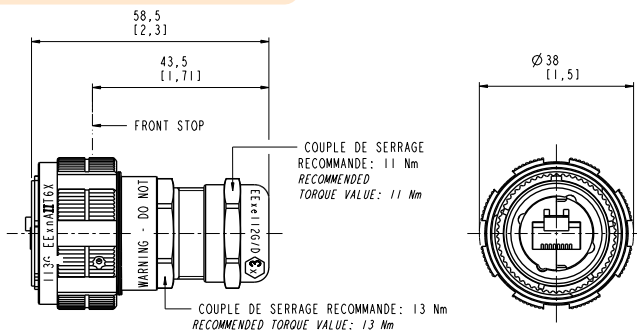


RJFTVX • Rugged and sealed RJ45 connector



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 24).

Plug

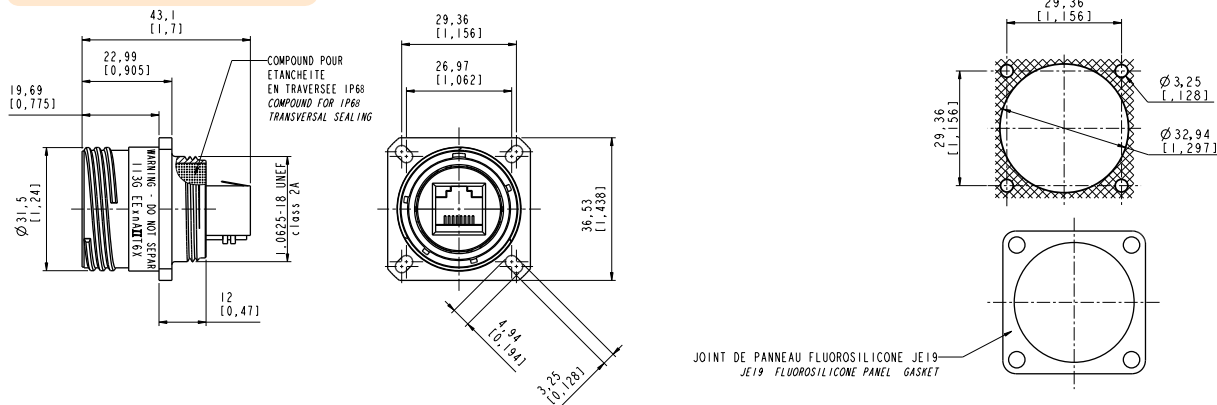


Characteristics

- 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

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

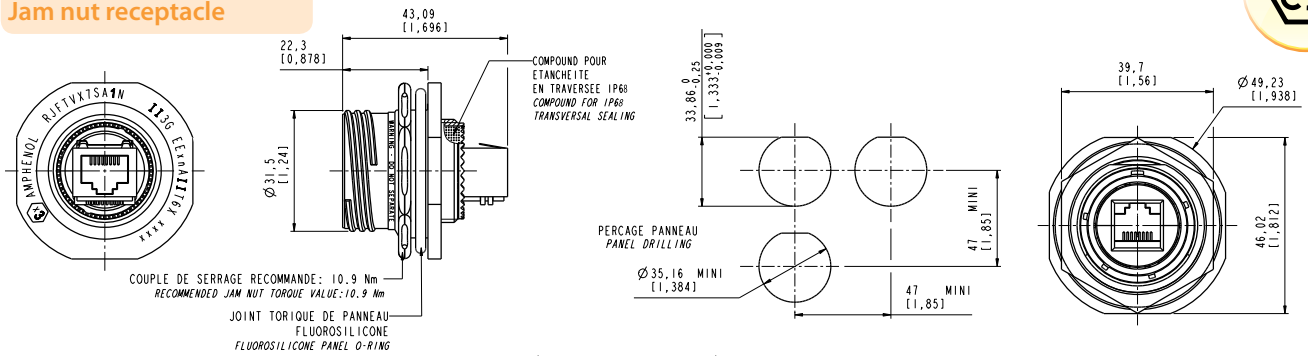
Square flange receptacle



		Nickel plating	Olive drab cadmium plating
Part number	Receptacle, RJ45 back termination, coding A	RJFTVX2SA1N	RJFTVX2SA1G
	Receptacle cap	RJFTVC2N	RJFTVC2G

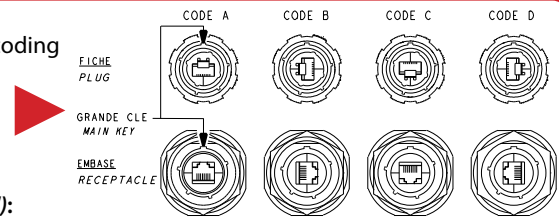


Jam nut receptacle



		Nickel plating	Olive drab cadmium plating
Part number	Receptacle, RJ45 back termination, coding A	RJFTVX7SA1N	RJFTVX7SA1G
	IP68 metallic cap	RJFTVC7N	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



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
	RJFTVX2SA2N03100BTX	RJFTVX2SA2G03100BTX	0.3
	RJFTVX2SA2N05100BTX	RJFTVX2SA2G05100BTX	0.5
	RJFTVX2SA2N10100BTX	RJFTVX2SA2G10100BTX	1.0
	RJFTVX2SA2N15100BTX	RJFTVX2SA2G15100BTX	1.5

Part number code

Series	RJ Field TV	RJFTVX	75	A	2	N	05 100BTX
Shell Type	25 : Square flange receptacle 75: Jam nut receptacle 6 : 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]						



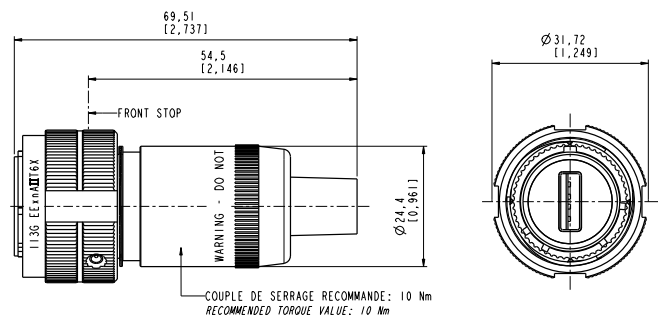
USBFTVX • Rugged and sealed USB connector



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 72).

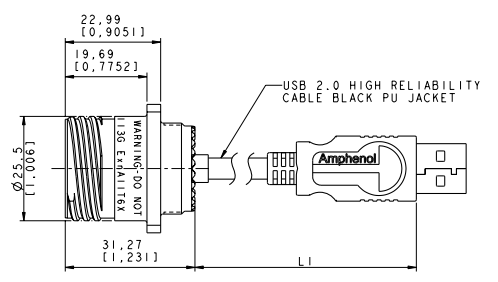
Characteristics	
■ Ex marking	II3G ExnAII6 X
■ Operating temperature range	-40°C / +70°C
■ Voltage	60 Veff max
■ Power	20 W max
■ Outside cable diameter	4mm to 6mm
■ Sealing	IP68
■ Data transmission	USB 2.0 up to 480 Mb/s

Plug

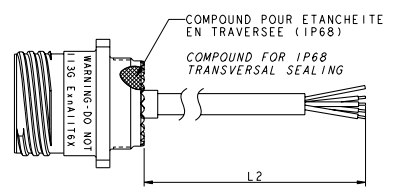


Part number	Plug	Nickel plating	Olive drab cadmium plating
		USBFTVX6N	USBFTVX6G
IP68 metallic cap	USBFTVC6N	USBFTVC6G	

Square flange receptacle

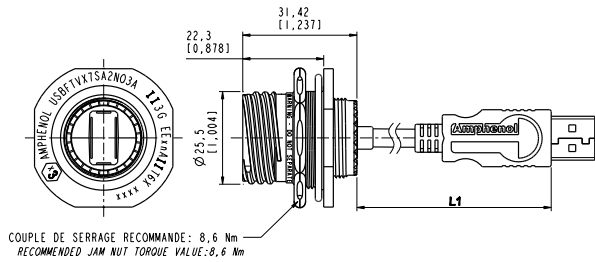


Cable end Type "A" (Standard USB "A" Plug)

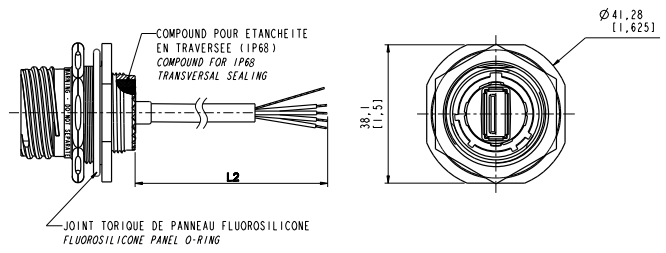


Cable end Type "OPEN" (No connector)

Jam nut receptacle



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



Cable end Type "OPEN" (No connector)

Part number code

Series	USBF TVX	2S	A	2	N	03	A
USB Field TV							
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 :

		Nickel plating	Olive drab cadmium plating
Part number FOR	Cap for Square flange receptacle	USBFTVC2N	USBFTVC2G
	Cap for Jam nut receptacle	USBFTVC7N	USBFTVC7G



RJ11FTVX • Rugged and sealed RJ11/12 connector



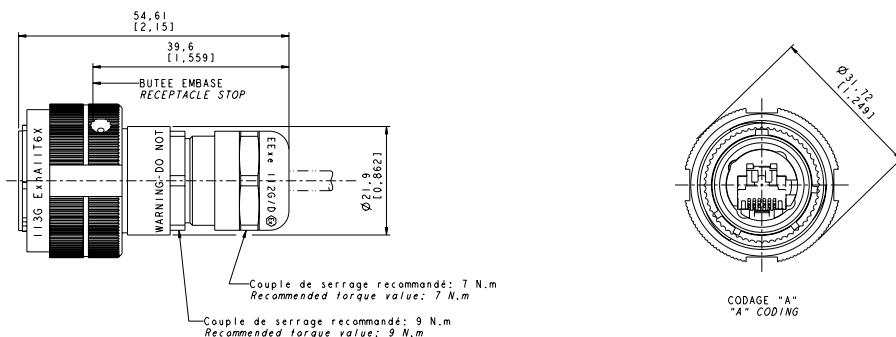
RJ11FTVX allows you to use a standard phone RJ11/RJ12 connection in Atex zone 2 environments.

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

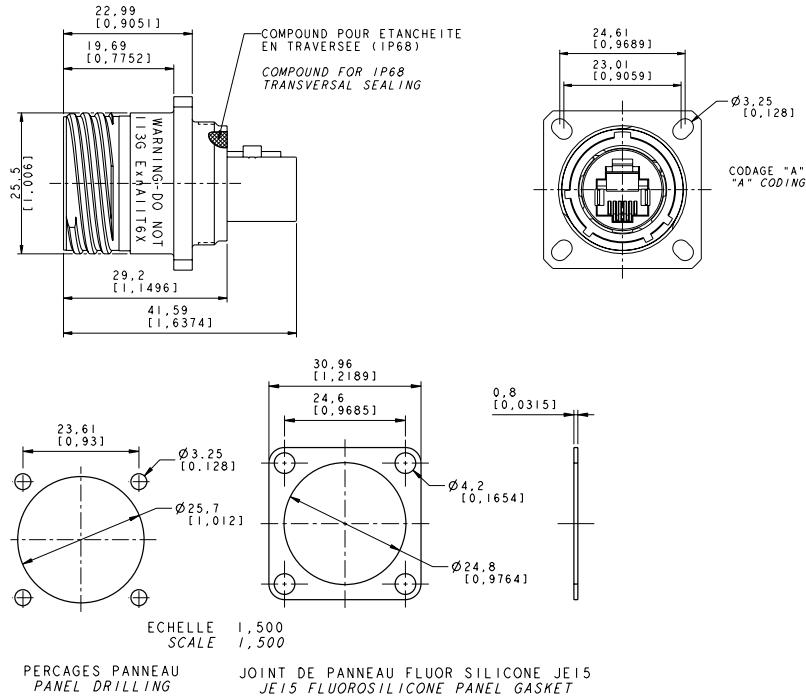
■ Ex marking	II3G ExnAII T6 X
■ Operating temperature range	-40°C / +60°C
■ Voltage	60 Veff max
■ Power	20 W max
■ Outside cable diameter	4mm to 5.5mm
■ Sealing	IP68
■ Coupling mechanism	Tri Star thread with anti-decoupling device (MIL-DTL-38999 series III)
■ Mating cycles	500 min
■ Salt spray	48h with 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



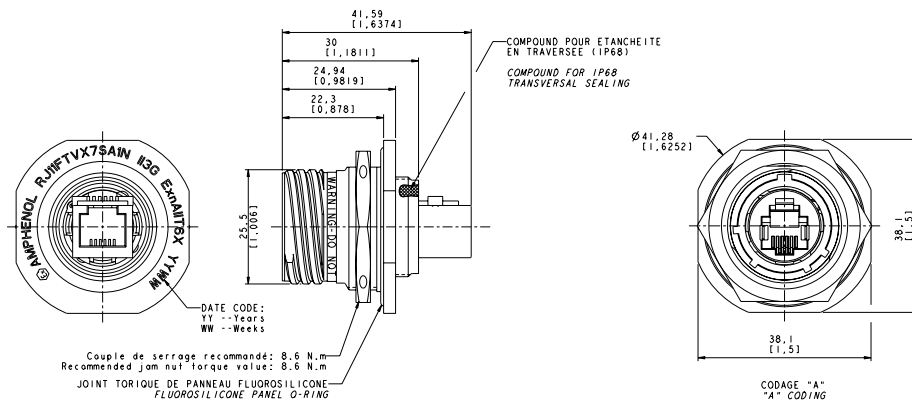
Part number	Nickel plating		Olive drab cadmium plating	
	Plug	RJ11FTVX6MN	RJ11FTVX6MG	
Cap	RJ11FTVC6N	RJ11FTVC6G		

Square flange receptacle



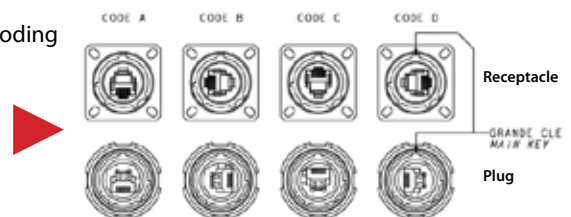
Part number	Receptacle - Female RJ45 back termination - Coding A	Nickel plating	Olive drab cadmium plating
	Receptacle CAP	RJ11FTVX2SA1N	RJ11FTVX2SA1G
		RJ11FTVC2N	RJ11FTVC2G

Jam nut receptacle



Part number	Receptacle - Female RJ45 back termination - Coding A	Nickel plating	Olive drab cadmium plating
	Receptacle CAP	RJ11FTVX7SA1N	RJ11FTVX7SA1G
		RJ11FTVC7N	RJ11FTVC7G

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)



RJSPCEX ATEX ZONE 2 RUGGED & IP68

Sealed ethernet switch



This Ethernet Switch is a combination of rugged packaging with locking device for Zone 2 hazardous location, with fault-tolerant network redundancy.

Industrial Applications

- Oil & Gas
- Process Control
- Factory Automation

P/N: RJSPC-EX-5ES1-PLG-CAPS

Note: this part number includes:

- One ATEX Zone 2 IP68 Plug and Play Ethernet switch equipped with caps on Ethernet connectors
- One power plug equipped with anti decoupling nut
- Five Ethernet plugs equipped with anti decoupling spring

P/N: RJSPC-EX-5RS1-PLG-CAPS

Note: this part number includes:

- One ATEX Zone 2 IP68 RING Ethernet switch equipped with caps on Ethernet connectors
- One power plug equipped with anti decoupling nut
- Five Ethernet plugs equipped with anti decoupling spring

Outstanding features

- IP65/68 Sealing
- ATEX Zone 2II3G ExnAII T4X (EN60079-15 & EN60079-0)
- Plug and Play simplicity
- Ring redundancy
- Operating temperature: -40°F to 170°F (-40°C to +75°C)

Key Features

- Ring Switch Networking Features (managed features available!)
 - Real-Time Ring for ultra-fast fault-tolerant loops
 - Recovery time of 30 ms + 5 ms per hop!
 - Modbus monitoring over Ethernet
 - Ideal for deterministic systems and PLCs
 - Real-time traffic prioritization (QoS and CoS)
 - Assure delivery of real-time data
 - Improve network utilization
 - User settable priority assignments
 - Advanced switch features
 - User configurable port settings
 - Port mirroring for traffic diagnostics
 - Pre-configurable for Plug-And-Play simplicity

Description (example for Ring model)

- Waterproof IP68 Rating (NEMA 6)
- Reduced Installation Costs with the patented RJStop® system
- Use any standard RJ45 cordset
- Rugged Enclosure in Polyester reinforced with 30% glass fiber
- Redundant power inputs with surge/spike protection
- Ultra reliable 1,000,000 hours Mean Time Between Failure (MTBF)
- Zone 2 hazardous location (models RJSPC-EX)



- 1 LEDs indicating activity, link status, datarate (10/100 Mbps)
- 2 LED indicating ring status
- 3 5 rugged IP68 RJ Field Ethernet ports
- 4 Real-time ring feature
- 5 IP68 polyester enclosure reinforced with glass fiber
- 6 OK power & ring status
- 7 LEDs indicating power
- 8 Anti-decoupling nut for power plug
- 9 Anti-decoupling spring for ethernet plugs