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.







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RJFTVX • Rugged and sealed RJ45 connector



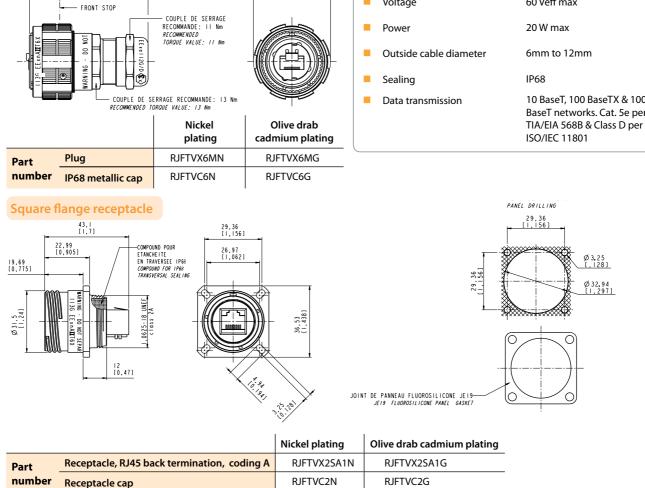
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43,5 [|,7|]

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).

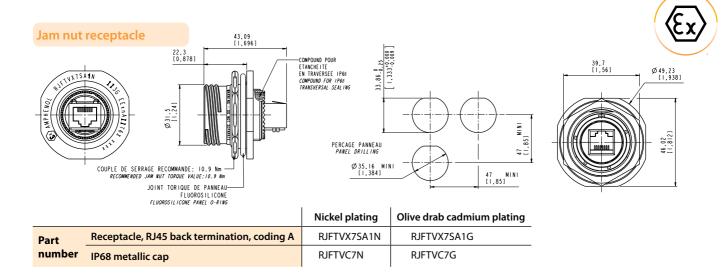
Characteristics

•	Ex marking	II3G ExnAlIT6 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



Ø 38 [1,5]

Plug



CODE A

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<u>FICHE</u> PLUG

GRANDE CLE MAIN KEY EMBASE RECEPTACL CODE B

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CODE C

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CODE D

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"*):

	Nickel plating	Olive drab cadmium plating	RJ45 cordset length Meters
Part	RJFTVX2SA2N03100BTX	RJFTVX2SA2G03100BTX	0.3
number	RJFTVX2SA2N05100BTX	RJFTVX2SA2 G 05100BTX	0.5
	RJFTVX2SA2N10100BTX	RJFTVX2SA2G10100BTX	1.0
	RJFTVX2SA2N15100BTX	RJFTVX2SA2 G 15100BTX	1.5

Part number code

Series RJ Field TV	RJF TVX	75	A	2	N	05 100BTX
Shell Type 2S : Square flange receptacle 7S: 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 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]	n only)					

USBFTVX • Rugged and sealed USB connector



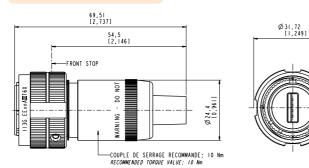


With USBFTVX, you can insert a standard USB 2.0 cordset into a metallic plug which will protect it from shocks, dust and fluids. This range is fitted to be used in Atex zone 2 environments. This metallic plug is connected into a receptacle, using a Tri Start thread coupling mechanism (MIL-DTL-38999 series III type) with anti-decoupling device for high vibrations. USBFTVX features the same main characteristics than USBFTV series (see page 72).

Characteristics

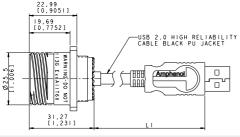
	Ex marking	II3G ExnAlIT6 X
	Operating temperature range	-40°C / +70°C
•	Voltage	60 Veff max
	Power	20 W max
	Outside cable diameter	4mm to 6mm
	Sealing	IP68
	Data transmission	USB 2.0 up to 480 Mb/s

Plug

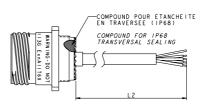


		Nickel plating	Olive drab cadmium plating
Part	Plug	USBFTVX6N	USBFTVX6G
number	IP68 metallic cap	USBFTVC6N	USBFTVC6G

Square flange receptacle

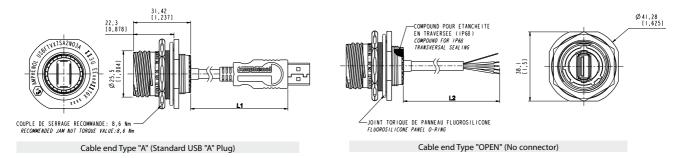


Cable end Type "A" (Standard USB "A" Plug)



Cable end Type "OPEN" (No connector)

Jam nut receptacle



Part number code

Series USB Field TV	USBF TVX	25	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 :

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

RJ11FTVX • Rugged and sealed RJ11/12 connector



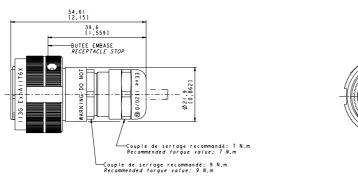


RJ11FTVX allows you to use a standard phone RJ11/RJ12 connection in Atex zone 2 environments.

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 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

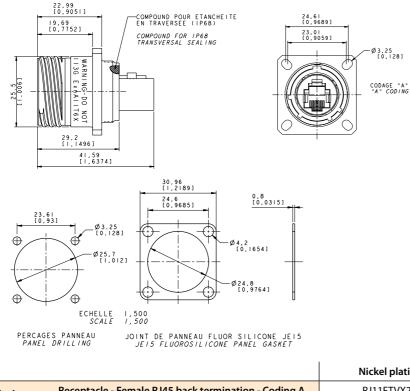
Plug



	,
CODAGE "A" <i>"A" CODING</i>	

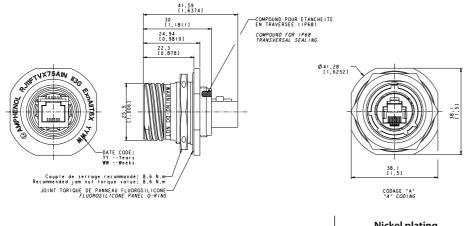
		Nickel plating	Olive drab cadmium plating
Part	Plug	RJ11FTVX6MN	RJ11FTVX6MG
number	Сар	RJ11FTVC6N	RJ11FTVC6G

Square flange receptacle



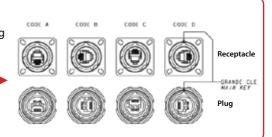
		Nickel plating	Olive drab cadmium plating
Part	Receptacle - Female RJ45 back termination - Coding A	RJ11FTVX2SA1N	RJ11FTVX2SA1G
number	Receptacle CAP	RJ11FTVC2N	RJ11FTVC2G





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



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

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)

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

ROHS

Outstanding features

- IP65/68 Sealing
- ATEX Zone 2II3G ExnAll 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
 - Assure delivery of real-time da
 - 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



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