

RJF TV6A

Cat6A 10 Gb/s Ethernet connection system for harsh environment



10Gb/s!

Description

RJFTV Cat6A allows you to use an Ethernet Class Ea / Cat. 6A connection for 10 BaseT, 100 BaseTx, 1000 BaseT or 10G BaseT up to 500 MHz networks in harsh 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. No hazardous on-field cabling and grounding!

Main Features

- Tri Start Thread coupling mechanism (MIL-DTL-38999 series III type) with anti-decoupling device
- Shell size 19
- No cabling operation in field and no tools required
- Mechanical coding / Polarization (4 positions)
- Improved EMI protection
- Mating cycles: 500 min
- Compatible with cable diameter from 6 mm [0.236 in] to 12 mm [0.512 in]
- Panel thickness: 1,6 mm min and 3,2 mm max for standard jam nut receptacle
- Compatible with standard RJFTV plug

Data Transmission:

- 10 BaseT, 100 BaseTX, 1000 BaseT and 10G Base T up to 500 MHz networks
- Cat.6A connector according to TIA568C.2 and ISO/IEC11801 standard

Environmental protection:

- Sealed against fluids and dusts: IP68 mated
- Compounded versions: IP68 unmated
- Salt spray: Aluminium shell:
 - Nickel plating ✓ : 48h.
 - Black zinc nickel plating ✓ : 500h
 - Olive drab cadmium plating: 500h
 - Marine bronze shell ✓ : 500h
- Stainless steel shell: Passivated ✓ : 500h

- Fire retardant/Low smoke: EN45545 + UL94V0 (non metallized inserts)
- Vibrations: 10 - 500 Hz, 10 g, 3 axes: no discontinuity > 1 micro s.
- Shocks: IK06 ► weight of 250 g drop from 40 cm [15.75 in]
 - onto connectors (mated pair)
- Temperature range: -40°C / +85°C

Markets & Applications

✓ : RoHS compliant



C4ISR, battlefield



Ground Vehicle



Navy



Railway



Applications :

- Data acquisition and transmission in harsh environment, radars, shelters, battlefield communication

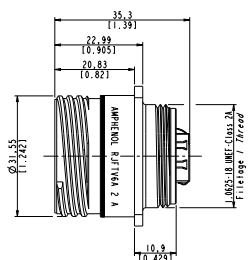
OVERALL DIMENSIONS - RECEPTACLES

x: see the 'How to order' below to complete your part number

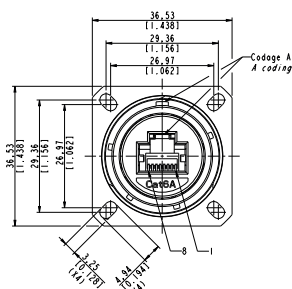
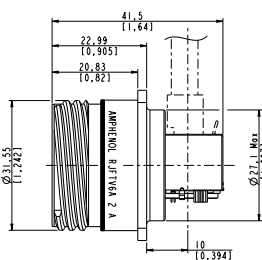
Square flange receptacle - 4 mounting holes: shell type 2

Compatible with standard plugs, accessories and cables

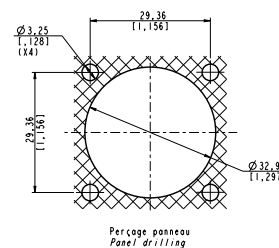
RJFTV6A 2 X 1 X



RJFTV6A 2 X 1RA X



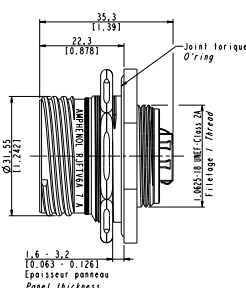
Panel drilling



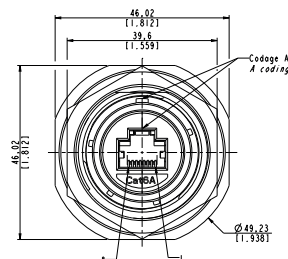
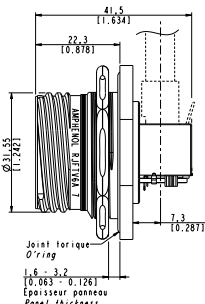
Jam nut receptacle - Hexagonal nut mounting: shell type 7

Compatible with standard plugs, accessories and cables

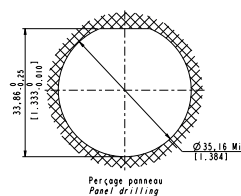
RJFTV6A 7 X 1 X



RJFTV6A 7 X 1RA X



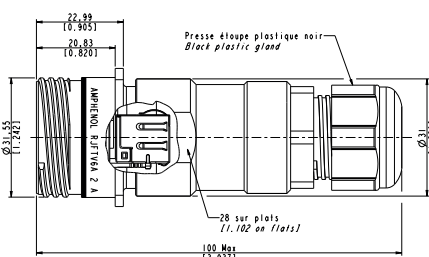
Panel drilling



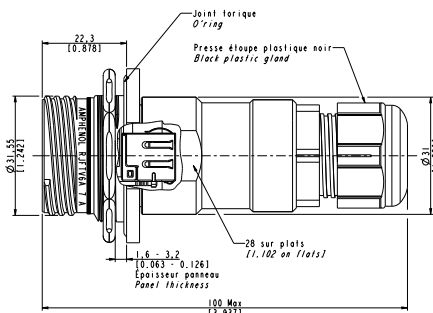
Receptacles with IP68 backshell: Shell type 2PE and 7PE with plastic gland

Compatible with standard plugs, accessories and cables

RJFTV6A 2X PE 1 X



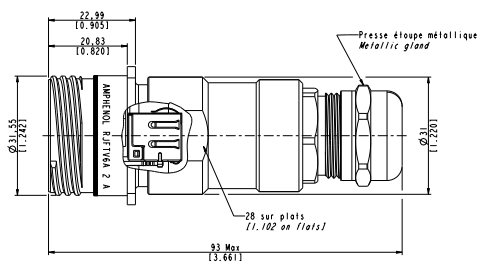
RJFTV6A 7X PE 1 X



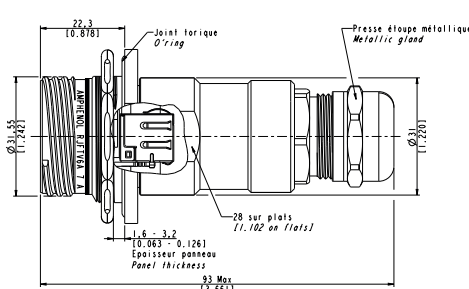
Receptacles with IP68 backshell: Shell type 2PEM and 7PEM with metal gland

Compatible with standard plugs, accessories and cables

RJFTV6A 2X PEM 1 X



RJFTV6A 7X PEM 1 X



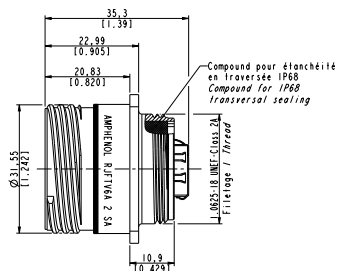
OVERALL DIMENSIONS - RECEPTACLES

x: see the 'How to order' below to complete your part number

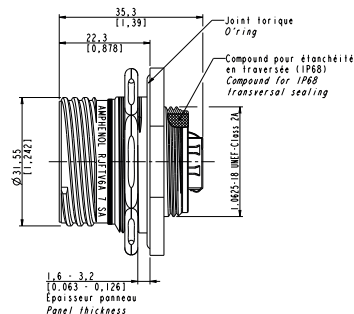
Sealed receptacles : Shell type 2S and 7S with compound for IP68 transversal sealing

Compatible with standard plugs, accessories and cables

RJFTV6A 2S X 1 X



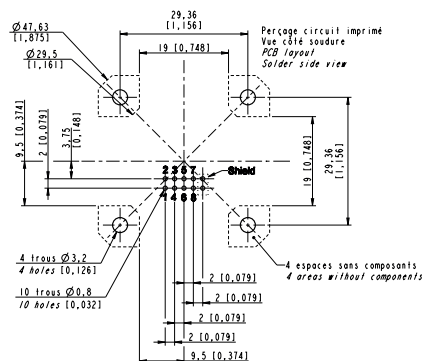
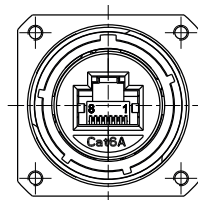
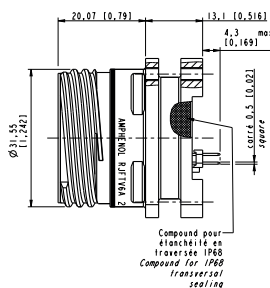
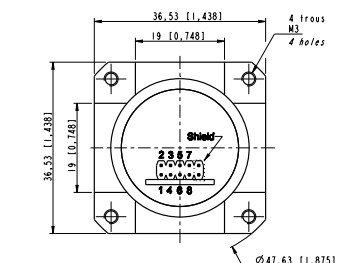
RJFTV6A 7S X 1 X



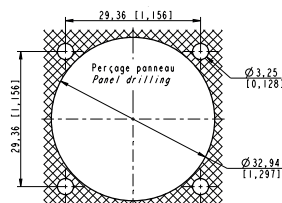
Stand-off receptacles : Shell type 2S with compound for IP68 transversal sealing: Deviation F459

Compatible with standard plugs, accessories and cables

RJFTV6A 2S X 5 X F459



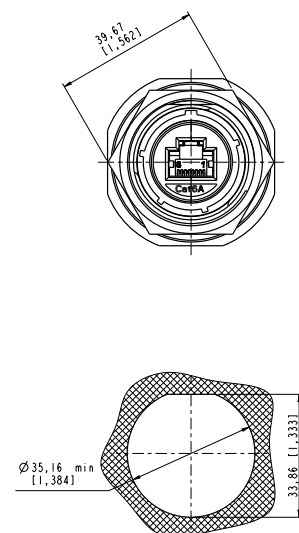
Panel drilling



x: see the 'How to order' below to complete your part number

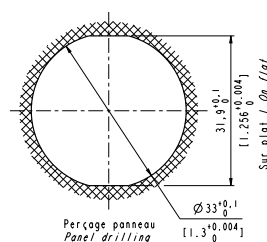
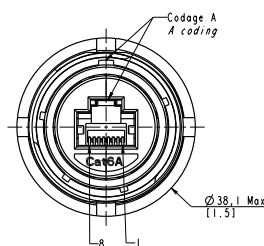
Compatible with standard plugs, accessories and cables

Panel drilling



Compatible with standard plugs, accessories and cables

Panel drilling



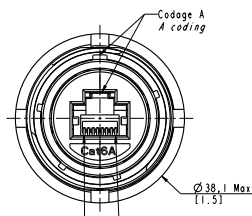
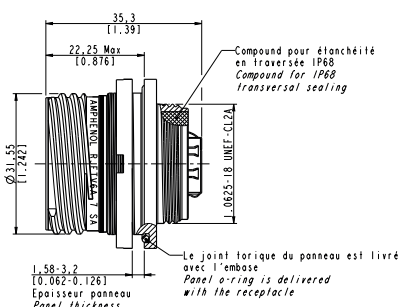
OVERALL DIMENSIONS - RECEPTACLES

x: see the 'How to order' below to complete your part number

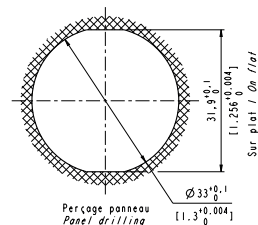
Reduced flange Jam nut receptacle – Castle nut mounting : Deviation F312 with compound for IP68 transversal sealing

Compatible with standard plugs, accessories and cables

RJFTV6A 7S X 1 X F312



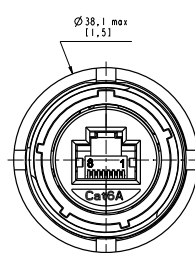
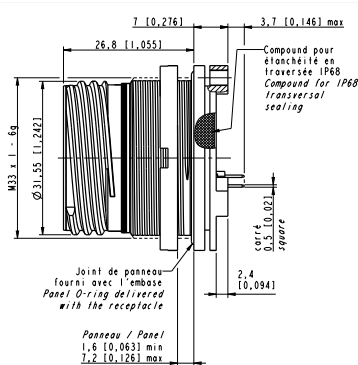
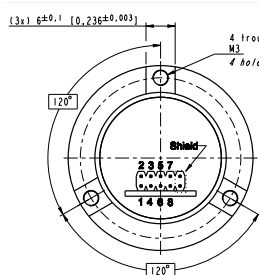
Panel drilling



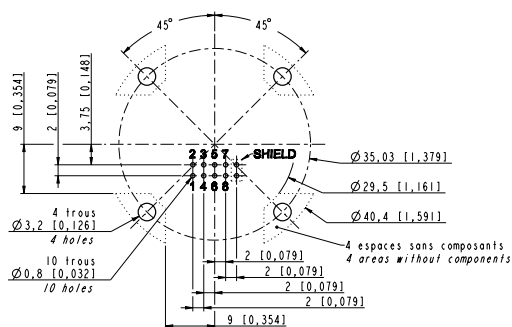
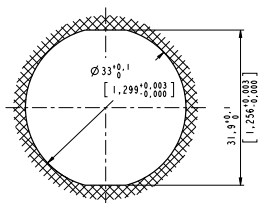
Reduced flange Stand-off Jam nut receptacle – Castle nut mounting : Deviation F059 with compound for IP68 transversal sealing

Compatible with standard plugs, accessories and cables

RJFTV6A 7S X 5 X F059



Panel drilling





NOTES



NOTES

Notes section with horizontal dotted lines for writing.

Mating parts and accessories

	Plugs	Protective caps	Tools/accessories	Cables
Mating parts	Standard RJFTV plugs	RJF TV caps Self-closing caps Rubber caps	RJF ODE JE18	Cat 6A cable
Refer to	RJ Field catalog (DOC-000075-ANG)	RJ Field catalog (DOC-000075-ANG) Protective caps data-sheet (DOC-000034-ANG)	RJ Field catalog (DOC-000075-ANG)	RJ Field catalog (DOC-000075-ANG)

How to order - RJFTV6A

	1.	2.	3.	4.	5.	6.
Series	Shell type	Coding	Material and platings	Back termination	Material and platings	Deviation
RJFTV6A	2	A	PE	1	ZN	F459

1. Shell type

2	Square flange receptacle
2S	Sealed square flange receptacle
7	Jam nut receptacle
7S	Sealed jam nut receptacle

2. Coding

A	
B	
C	
D	

3. Backshells

PE	IP68 backshell, plastic gland
PEM	IP68 backshell, metal gland
Blank	Receptacle without backshell

4. Back termination

1	Female RJ45	
1RA	Right angle female RJ45	
5	PC Tails	

5. Material and platings

	Shell material	Shell finish
G		Olive Drab cadmium
N	Aluminum	Nickel ✓
ZN		Black zinc nickel ✓
S	Stainless steel	Passivated ✓
BZ	Bronze ✓	-

6. Deviation

F459	Square flange receptacle
F312	Reduced flange Jam nut receptacle
F059	Reduced flange Stand-off Jam nut receptacle

✓ : RoHS compliant

Amphenol Socapex
948, promenade de l'Arve BP29
74311 Thyez Cedex - France
Phone: +33 (0)4 50 89 28 00
contact@amphenol-socapex.fr

www.amphenol-socapex.com
Follow Amphenol Socapex on social media :



We reserve the right to modify our products in any way we deem necessary.
Any duplication is prohibited, unless approved in writing.

Designed by Amphenol Socapex
DOC-001020-ANG - September 2019

Amphenol SOCAPEX