

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 :

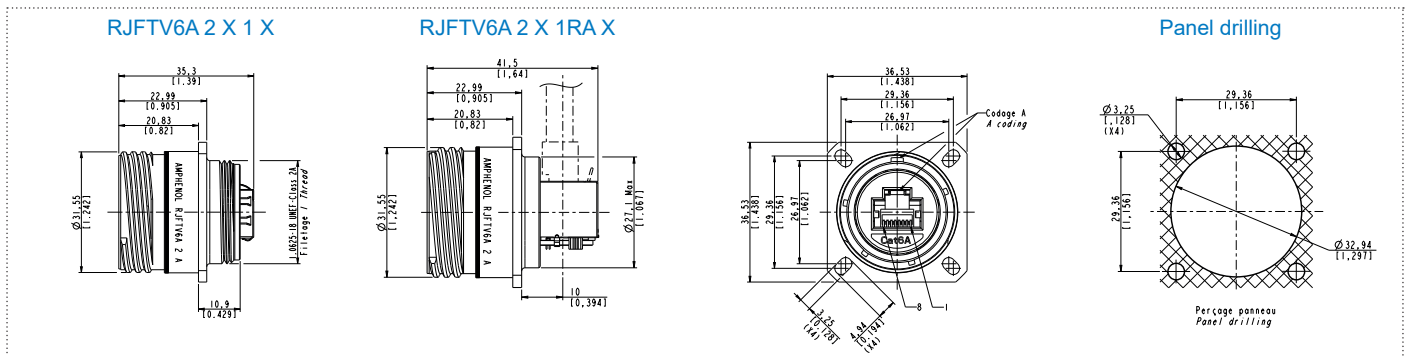
- Data acquisition and transmission in harsh environment, radars, shelters, battlefield communication

OVERALL DIMENSIONS - RECEPTACLES

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

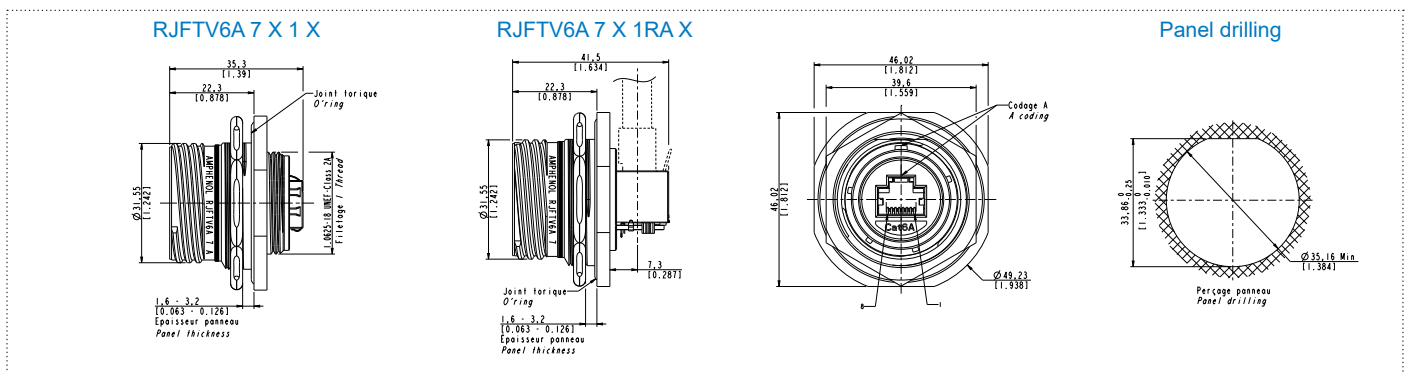
Square flange receptacle - 4 mounting holes: shell type 2

Compatible with standard plugs, accessories and cables



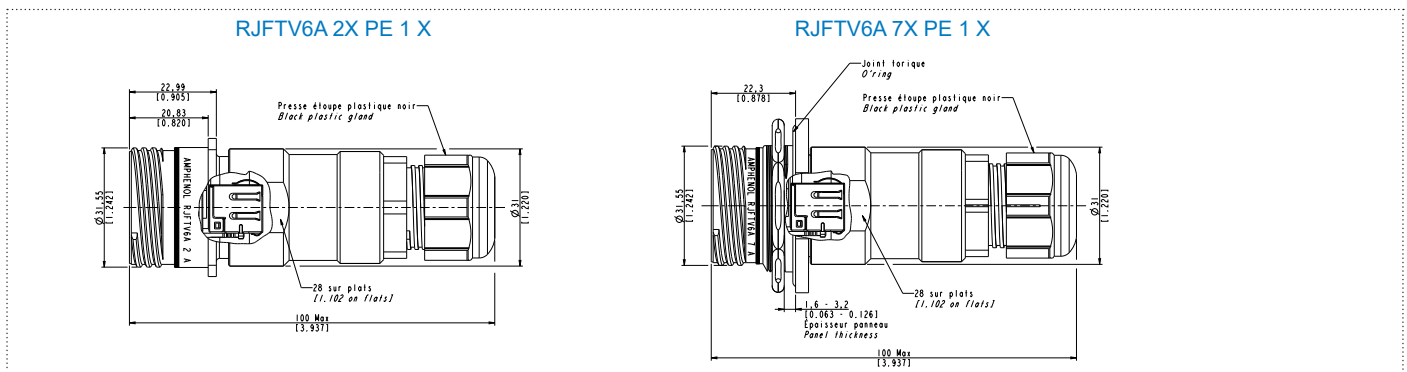
Jam nut receptacle - Hexagonal nut mounting: shell type 7

Compatible with standard plugs, accessories and cables



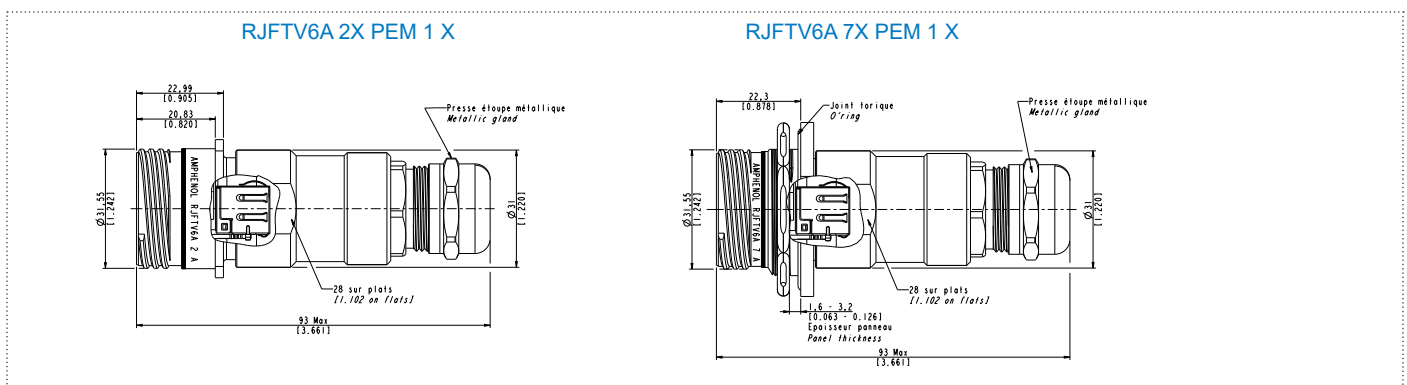
Receptacles with IP68 backshell: Shell type 2PE and 7PE with plastic gland

Compatible with standard plugs, accessories and cables



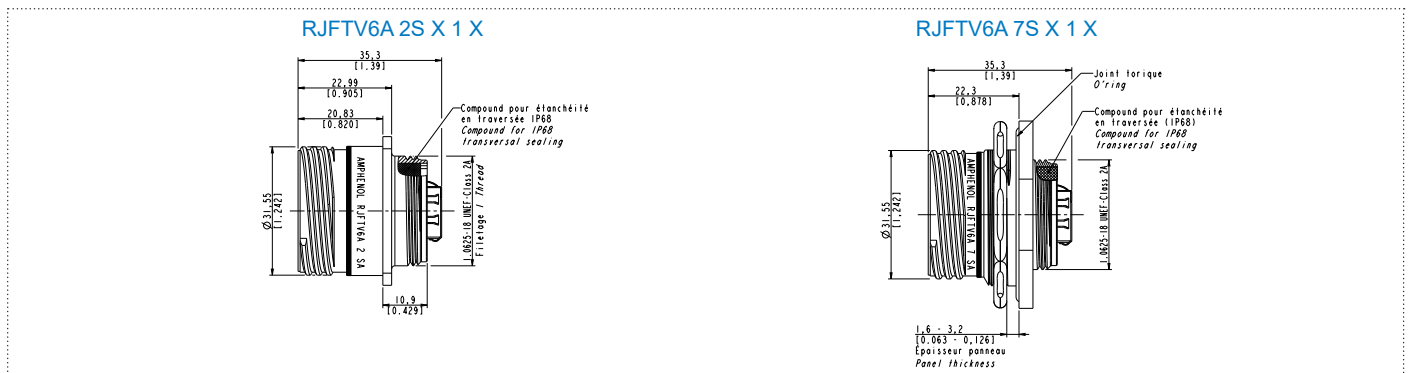
Receptacles with IP68 backshell: Shell type 2PEM and 7PEM with metal gland

Compatible with standard plugs, accessories and cables



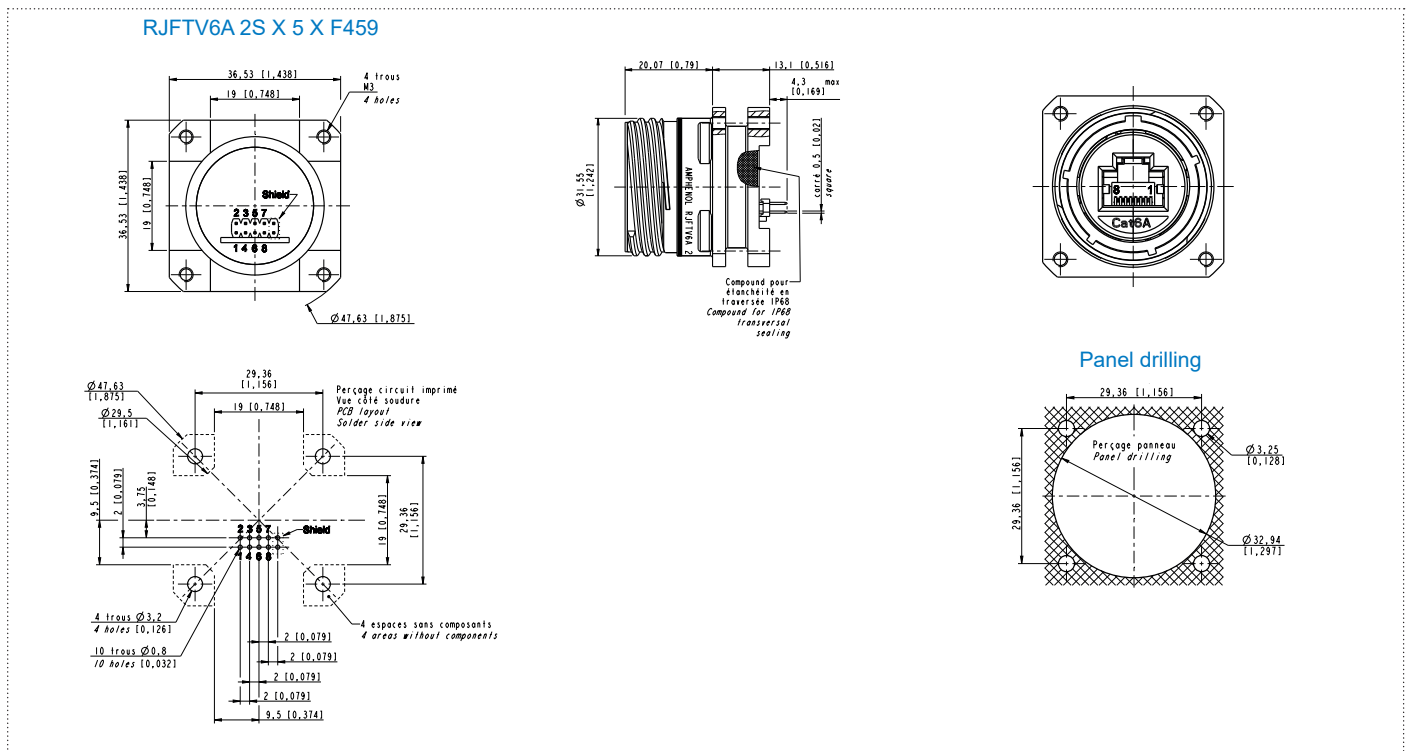
Sealed receptacles : Shell type 2S and 7S with compound for IP68 transversal sealing

Compatible with standard plugs, accessories and cables



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

Compatible with standard plugs, accessories and cables



OVERALL DIMENSIONS - RECEPTACLES

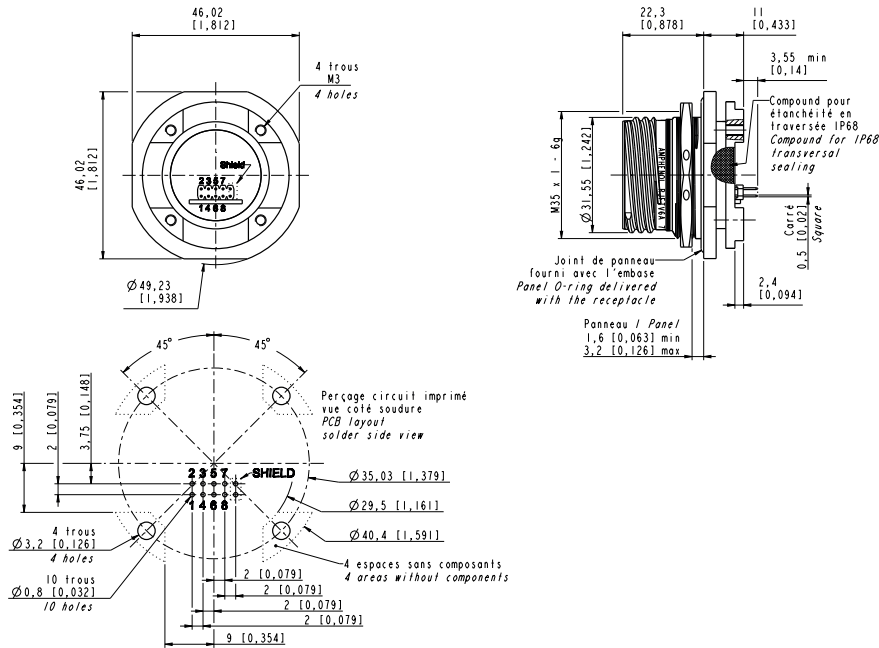
x: see the 'How to order' below to complete your part number

Stand-off receptacles: Shell type 7S with compound for IP68 transversal sealing: deviation F459

Compatible with standard plugs, accessories and cables

RJFTV6A 7S X 5 X F459

Panel drilling

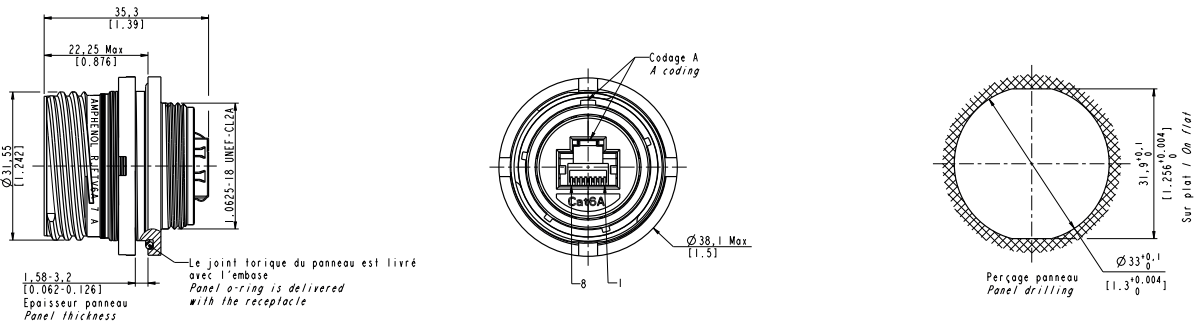


Reduced flange Jam nut receptacle – Castle nut mounting: Deviation F312

Compatible with standard plugs, accessories and cables

RJFTV6A 7 X 1 X F312

Panel drilling

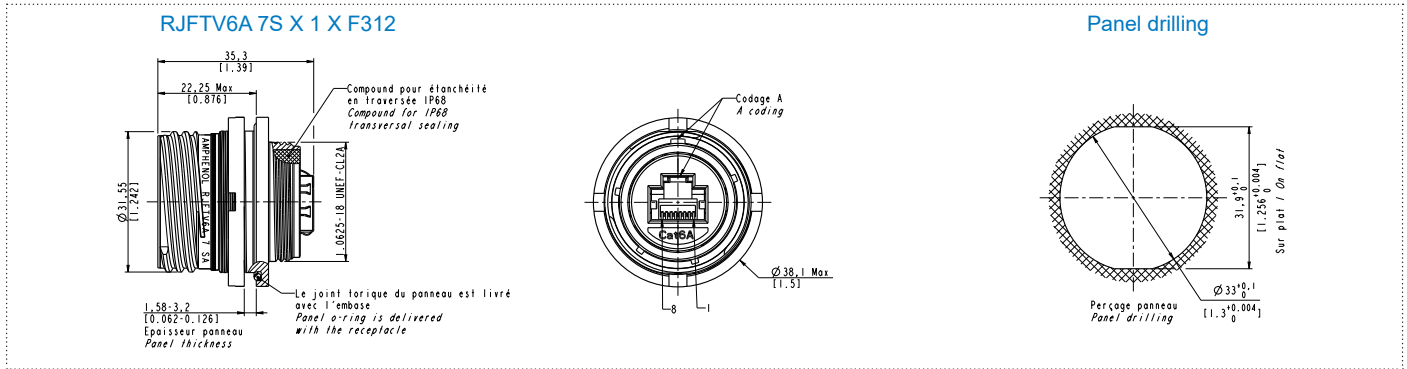


OVERALL DIMENSIONS - RECEPTACLES

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

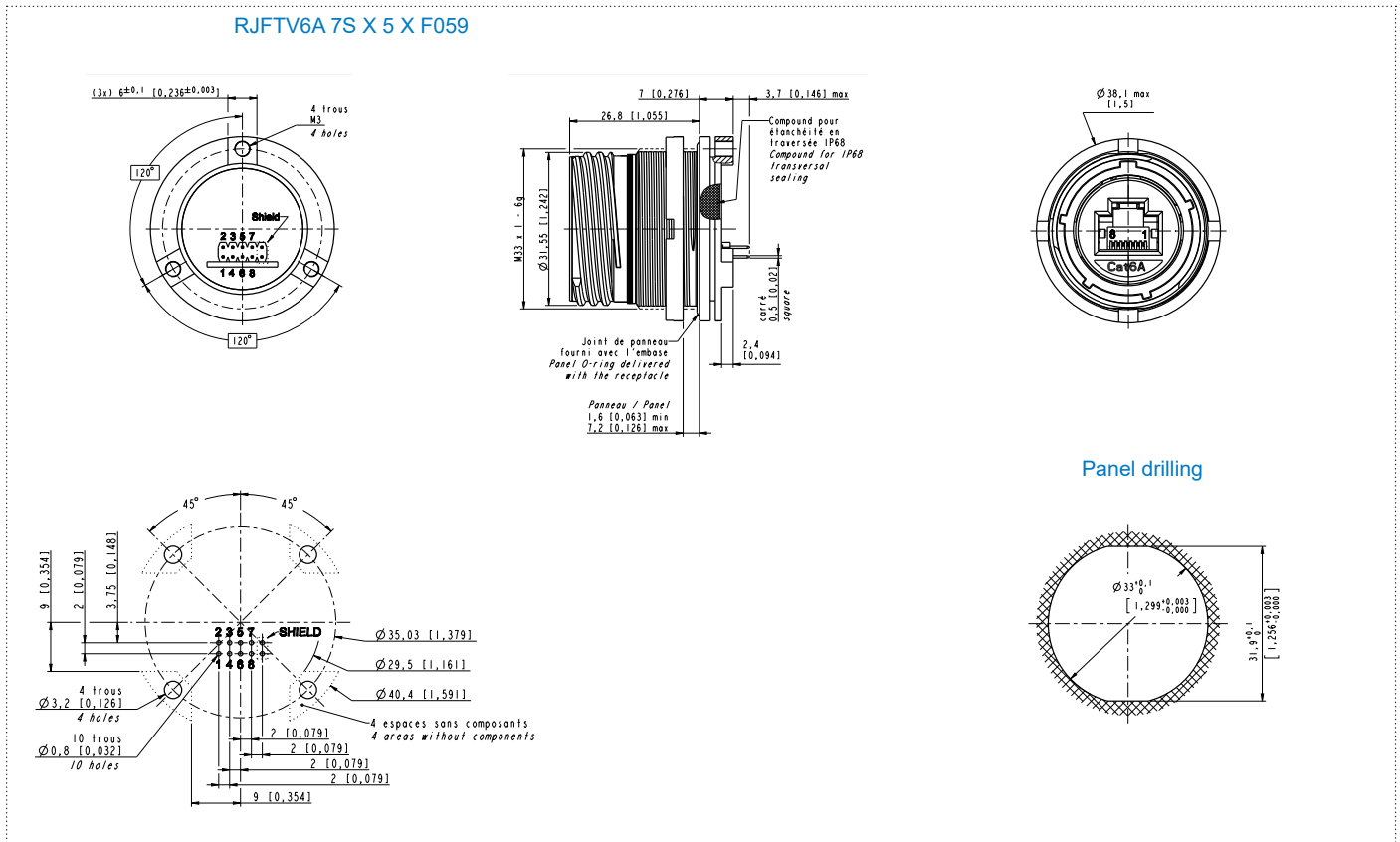
Reduced flange Jam nut receptacle – Castle nut mounting : Deviation F312 with compound for IP68 transversal sealing

Compatible with standard plugs, accessories and cables



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





NOTES

A series of horizontal dotted lines for writing notes, spanning the width of the page.

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

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

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