

## RJF 6A

Cat6A 10Gb/s Ethernet connection system for harsh environment



10Gb/s!

### Description

RJF Cat6A allows you to use an Ethernet Class Ea / Cat. 6A connection for 10 BaseT, 100 BaseTx, 1000 BaseT or 10 G 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

- Bayonet coupling (“Audible & Visual” coupling signal)
- Robust metallic shells based on MIL-DTL-26482 Series I - Shell size 18
- 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 jam nut receptacle
- Compatible with standard RJF plug

#### Data Transmission:

- 10 BaseT, 100 BaseTX, 1000 BaseT and 10G BaseT 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 ✓ : 96h
  - Olive drab cadmium plating: 500h
  - Black coating ✓ : 96h
- Fire retardant/Low smoke: EN45545 + UL94V0 (non metallized inserts)
- Vibrations: 10 - 500 Hz, 10 g, 3 axes: no discontinuity > 10 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 :

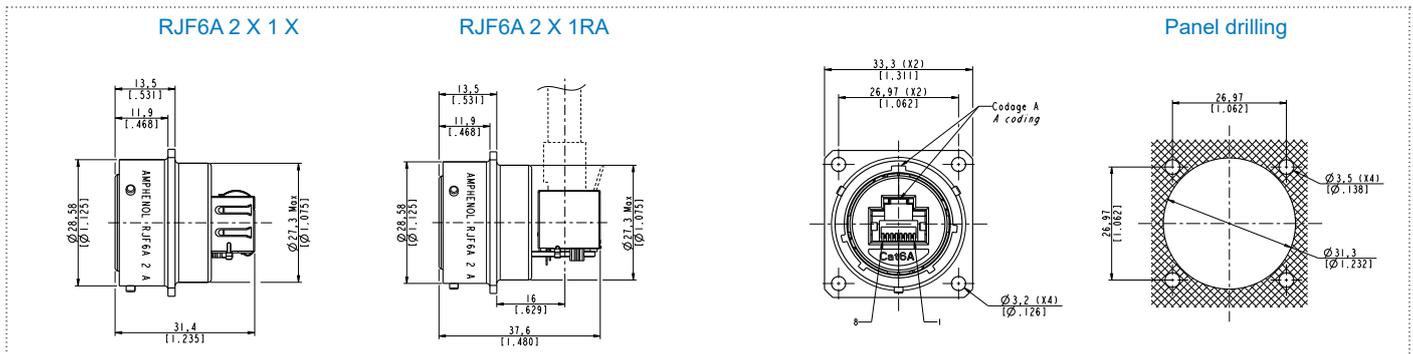
• Vetrionics, Military Ethernet & USB networks, Ethernet Switches, Communications, Sensors, Optronics

# OVERALL DIMENSIONS - RECEPTACLES

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

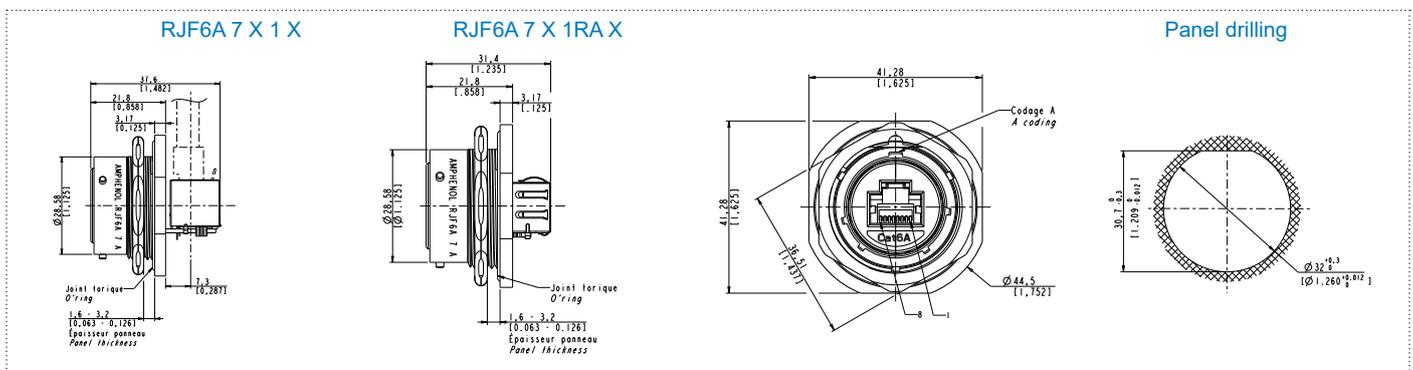
## Square flange receptacle - 4 mounting holes: shell type 2

Compatible with standard plugs, accessories and cables



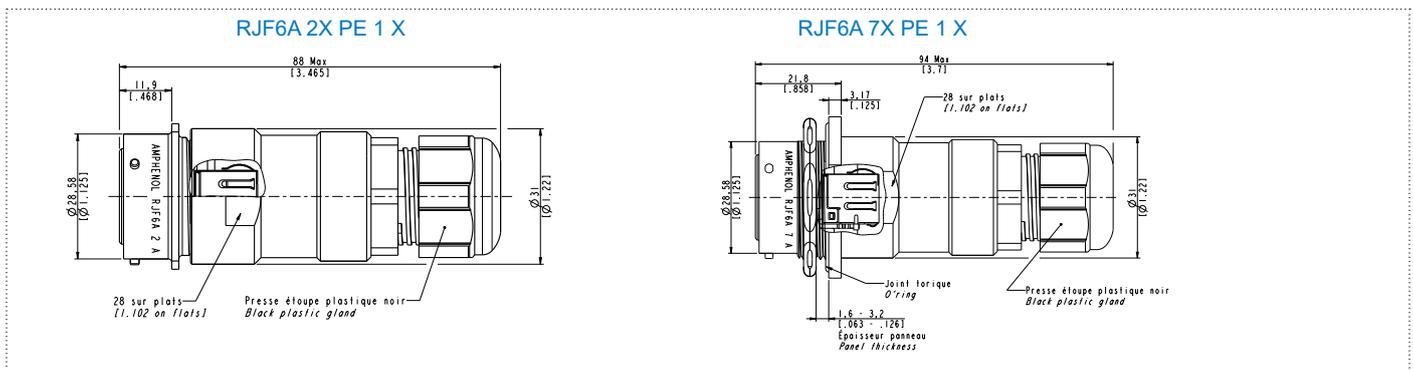
## Jam nut receptacle - Hexagonal nut mounting: shell type 7

Compatible with standard plugs, accessories and cables



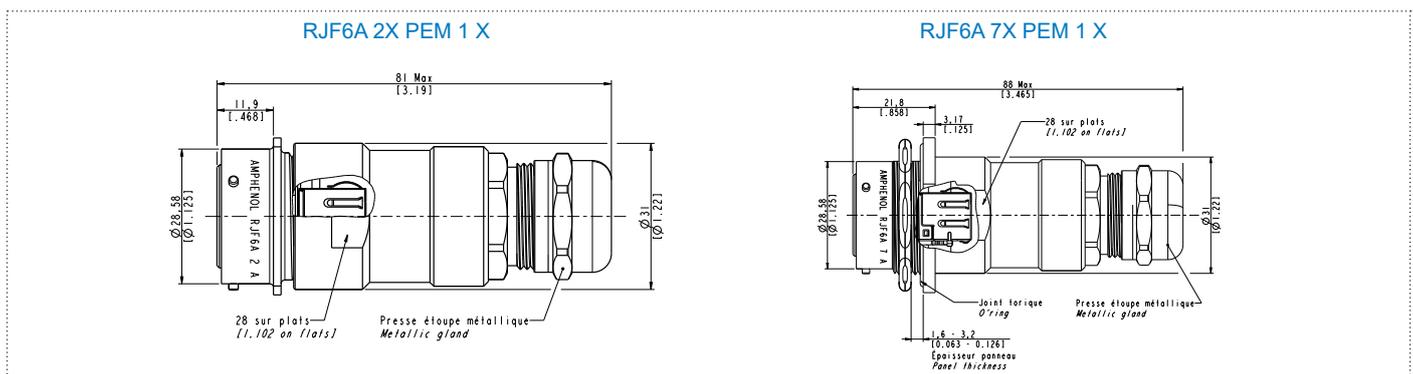
## Receptacles with IP68 backshell: shell type 2PE and 7PE with plastic gland

Compatible with standard plugs, accessories and cables



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

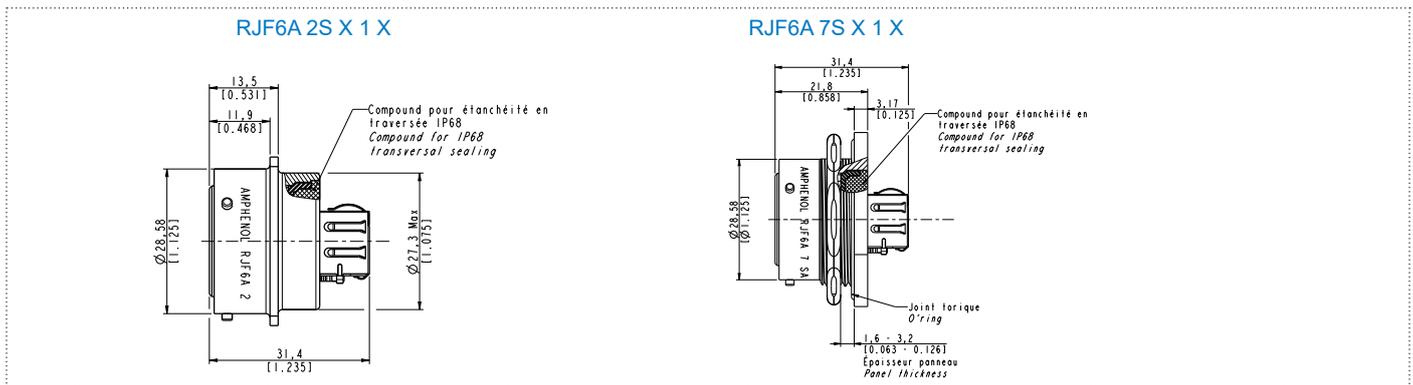
Compatible with standard plugs, accessories and cables



# OVERALL DIMENSIONS - RECEPTACLES

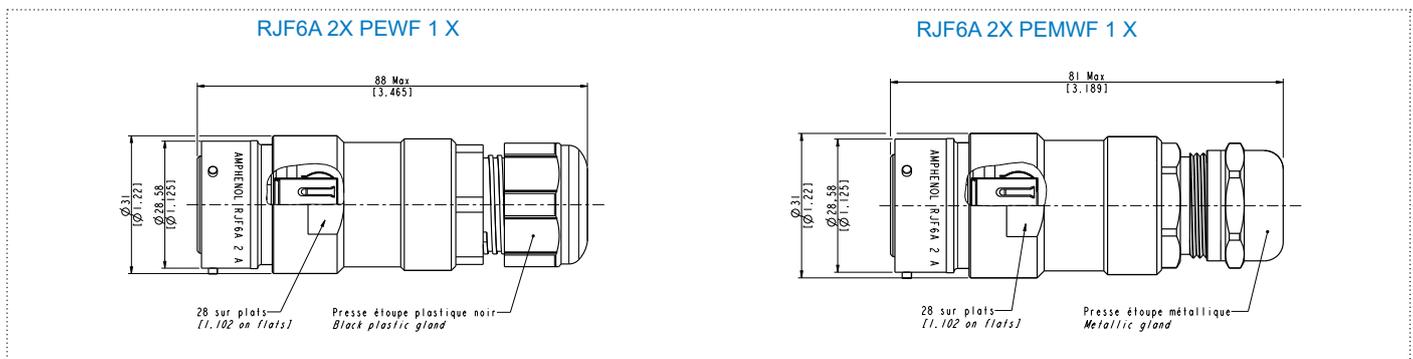
## Sealed receptacles: shell type 2S and 7S with compound for IP68 transversal sealing

Compatible with standard plugs, accessories and cables



## Inline cable mount receptacles: shell type 2PEWF with plastic or 2PEMWF metal gland

Compatible with standard plugs, accessories and cables



## Mating parts and accessories

	Plugs	Protective caps	Tools/accessories	Cables
Mating parts	Standard RJF plugs	RJF caps Composite 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)

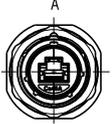
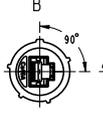
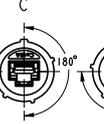
# How to order

	1.	2.	3.	4.	5.
Series	Shell type	Coding	Backshells	Back termination	Material and platings
RJF6A	2	A	PE	1	ZN

## 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
PEWF	Inline cable mount receptacles, IP68 backshell, plastic gland
PEMWF	Inline cable mount receptacles, IP68 backshell, metal gland
Blank	Receptacle without backshell

## 4. Back termination

1	Female RJ45	
1RA	Right angle female RJ45	

## 5. Material and platings

	Shell material	Shell finish	Inserts
B	Aluminum	Back coating ✓	Non metallized
G		Olive Drab cadmium	Metallized
N		Nickel ✓	Metallized
ZN		Black zinc nickel ✓	Metallized

✓ : RoHS compliant

