

RJF TV6 - Reduced Flange

Cat6 Ethernet connection system for harsh environment
Smaller and Lighter



Description

Derived from standard RJF TV6, Reduced Flange RJF TV6 is ideal for applications where small dimensions and lower weight are critical.

RJF TV Cat.6 allows you to use an Ethernet Class E / Cat.6 connection for 10 Base-T, 100 Base-TX or 1000 Base-T up to 250 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

- Smaller: **41% footprint surface reduction**
- Lighter: **15% lighter than standard RJF TV receptacles**
- MIL-DTL-38999 coupling mechanism
- Mates with standard RJF TV plugs & caps
- 3 platings: Olive Drab Cadmium, Nickel, Black Zn Ni
- Cat.6 Ethernet : 1Gb up to 250 MHz
- Reduced Flange Deviation (to be added at the end of your part number):
 - **F312** with standard castle nut
 - **F311** with safety castle nut*



standard castle nut

* safety castle nut

Main characteristics

Sealed against fluids and dust (IP68)

Shock, vibration and traction resistant

No cabling operation in field and no tools required

Mechanical coding / Polarization (4 positions)

Improved EMI protection

Tri start thread coupling mechanism (MIL-DTL-38999 series III type) with anti-decoupling device - shell size 19

Mating cycles: 500 minimum

Environmental protection

Sealing: IP68 when mated with cap or potted version without cap

Salt spray:

> 48h with aluminium shell - Nickel ✓

> 500h with aluminium shell - Olive drab cadmium plating

> 500 h with aluminium shell - Black zinc nickel ✓

Fire retardant / low smoke: UL94 V0 and EN45545

Vibrations (mated conditions):

10 - 500 Hz, 10 g, 3 axes: no discontinuity > 10 nano s

Shocks: IK06: weight of 250 g drop from 40 cm [15.75 in] onto connectors (mated pair)

Temperature range: -40°C / +85°C

✓: RoHS compliant

Data transmission

10 Base-T, 100 Base-TX and 1000 Base-T up to 250 MHz networks
Cat.6 per EIA/TIA 568 and ClassE per ISO 11801

Markets & Applications



C4ISR, Battlefield, Ground vehicles



Navy



Railway

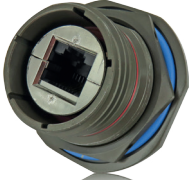
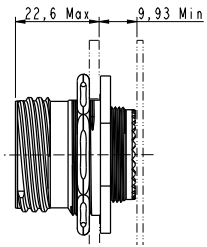
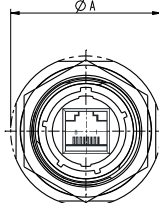
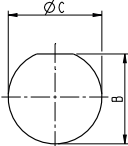

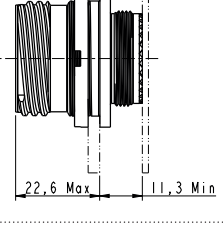
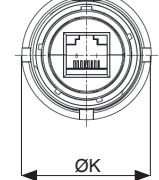
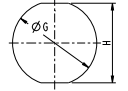


Applications:

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

RJF TV6 - Reduced Flange

Smaller Dimensions and 15% lighter

Product	Length (mm)	Footprint (mm)	Panel dimension (mm)
Standard RJF TV6 	Standard RJF TV6 	Standard RJF TV6 	Standard RJF TV6 
Reduced Flange RJF TV6 	Reduced Flange RJF TV6 	Reduced Flange RJF TV6 	Reduced Flange RJF TV6 
	Increase of internal length by 1,37 mm	41% footprint surface reduction	

Footprint Saving

41% footprint surface reduction:

Shell Size	RJF TV6 standard diameter ØA max (mm)	RJF TV6 Reduced Flange diameter ØK max (mm)	Footprint surface reduction Reduced Flange vs standard
19	49,5	38,1	41%

Panel Dimension

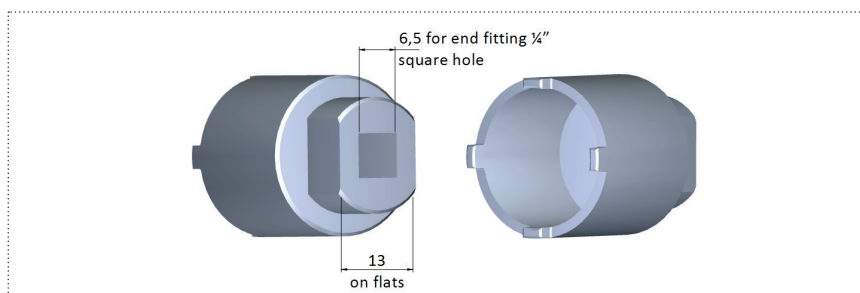
Size	RJF TV6 Standard		RJF TV6 Reduced Flange	
	B ⁰ _{-0,25} (mm)	ØC ^{+0,25} ₀ (mm)	ØG ^{+0,1} ₀ (mm)	H ^{+0,1} ₀ (mm)
19	33,91	35,18	33	31,9

Tools

Need of a specific tool for castle nut:

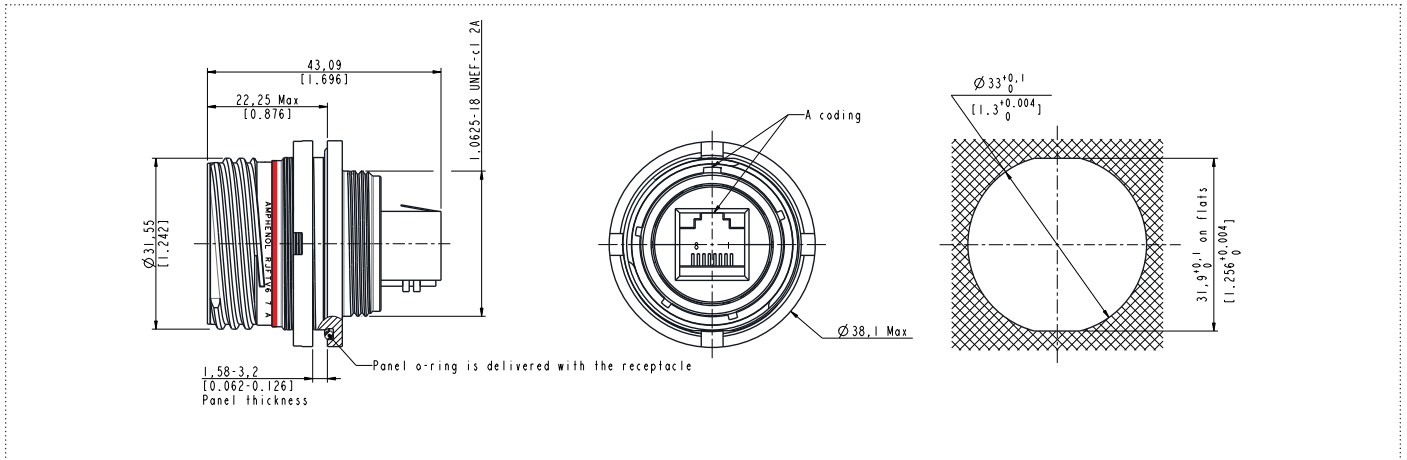
Size	Tool Part Number
19	809686

Max torque value: 10.7 N.m



RJF TV6 - Reduced Flange

Receptacle

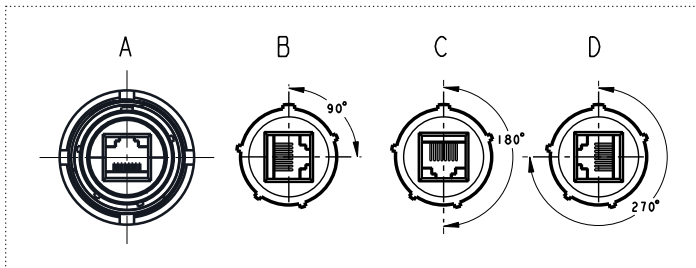


RJF TV6 7 X 1 X F312
Receptacle CAT6

Panel Drilling

Coding

To be specified in the part number: A,B,C, or D.



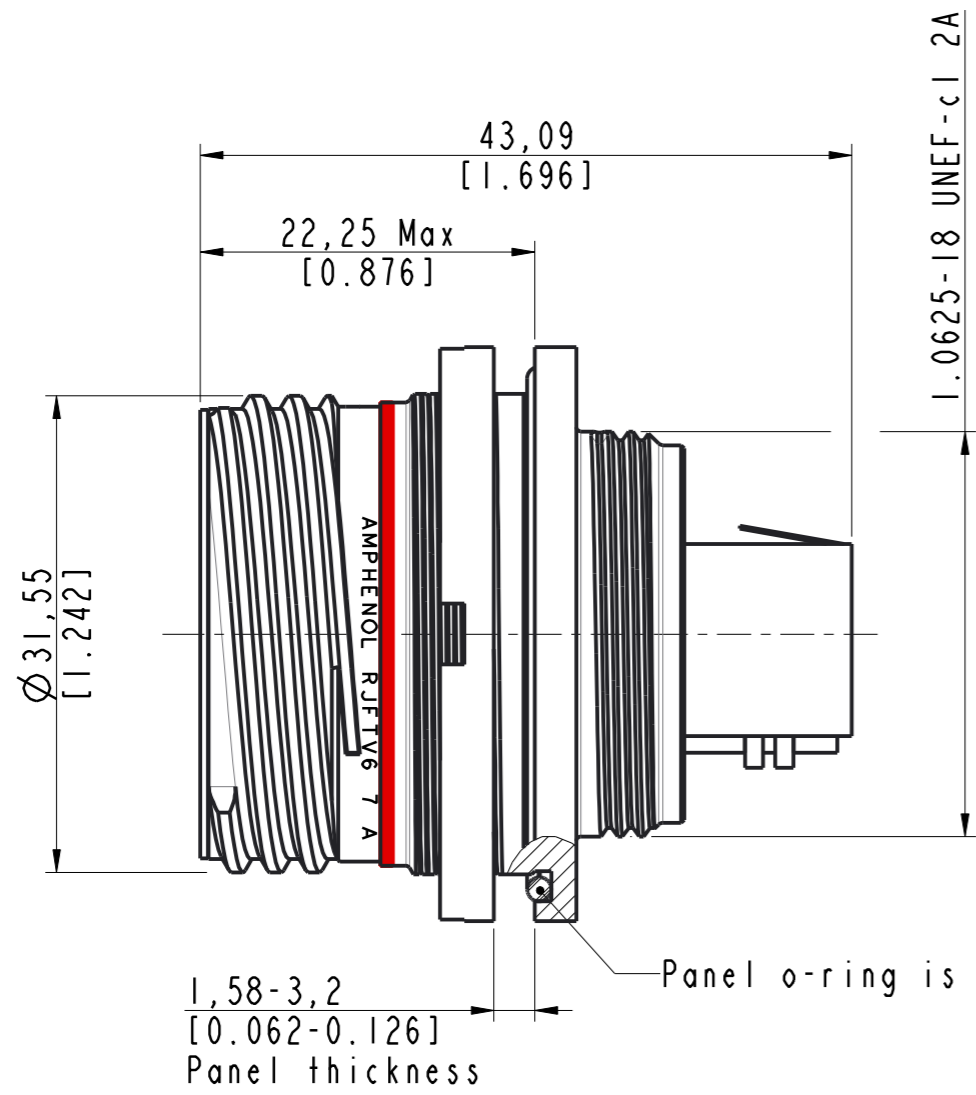
How to order

Series	RJF TV6	7	A	1	ZN	F312
Shell type 7: Jam nut receptacle 7S: Transversally sealed jam nut receptacle (IP68)						
Coding A, B, C or D						
Back termination 1: Female RJ45						
Shells material & Finish (inserts are metallized) N: Aluminium shell - nickel plating ✓ G: Aluminium shell - olive drab cadmium plating ZN: Aluminium shell - black zinc nickel plating ✓						
Deviation F312: Reduced Flange F311: Reduced Flange with safety castle nut						

Examples: RJFTV67A1ZNF312 ; RJFTV67B1GF311

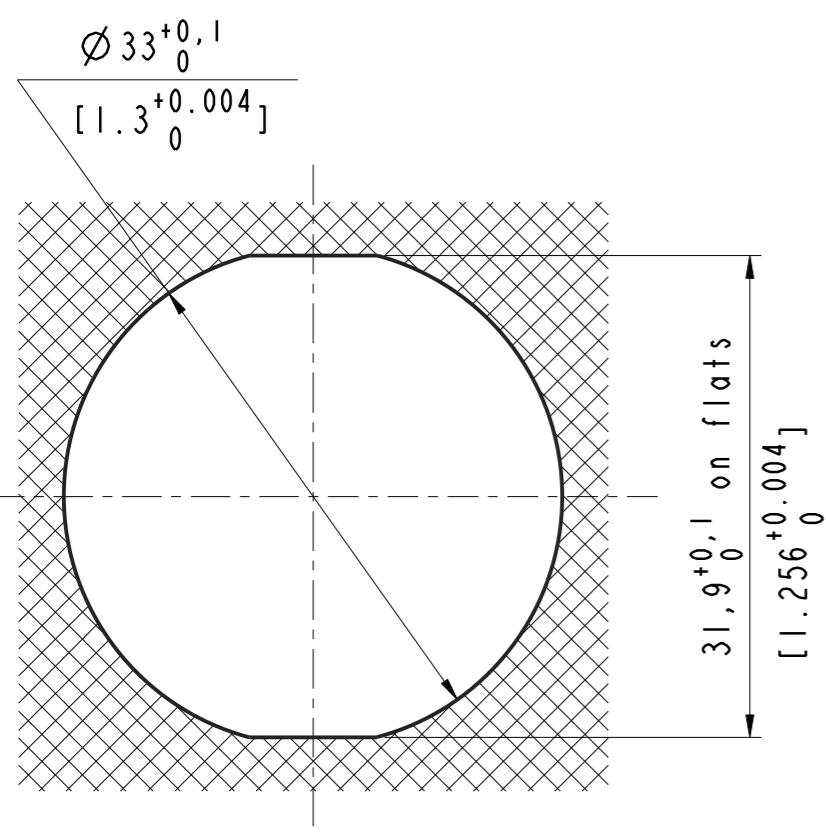
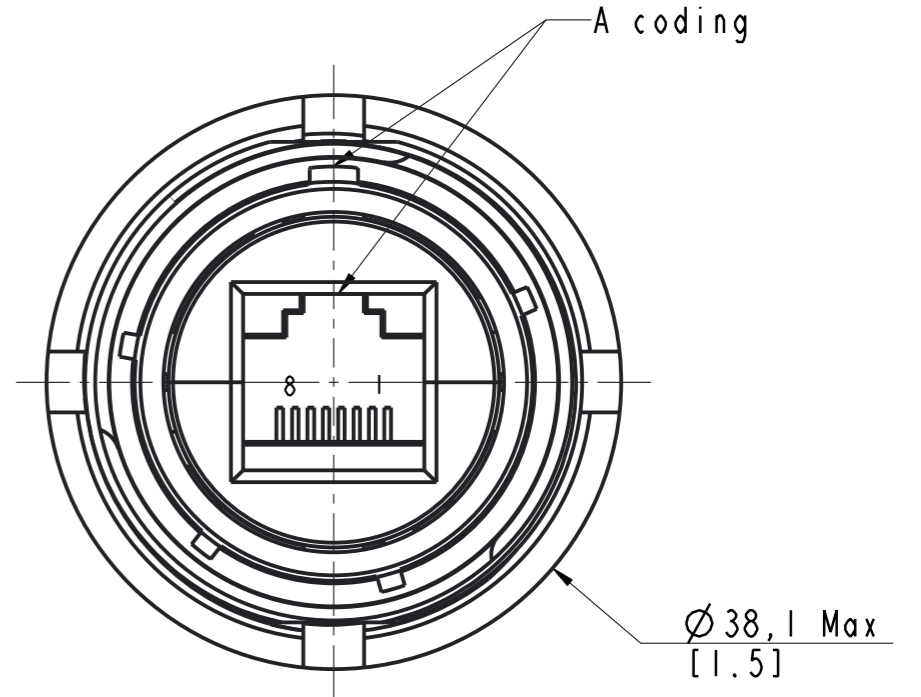
✓ : RoHS compliant

DANS LE BUT CONSTANT D'AMELIORER SES PRODUITS, Amphenol Socapex SE RESERVE LE DROIT D'EN MODIFIER TOUTE COTE OU CARACTERISTIQUE.
IMP 036 A



Panel o-ring is delivered with the receptacle

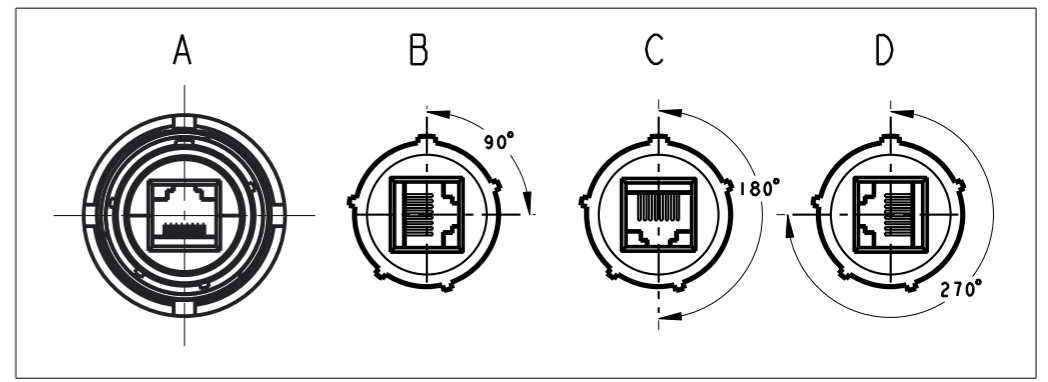
1,58-3,2
[0.062-0.126]
Panel thickness



Panel drilling

Customer Approval _____

Codings
See table



RJFTV6 7 x 1 x F312

Receptacle CAT6

Reduced Flange

- N: Nickel
- G: Olive drab cadmium
- ZN: Black zinc nickel

MODIFICATIONS	A	Plan original	ECHELLE
			2

Amphenol Socapex

BP 29 - 74311 THYEZ CEDEX

DESSIN: M.Peters	LE:11/01/17
TECHNIQUE: L.Guyomar	LE:11/01/17
A	
191-PLC-741-00	1/1