

## RJF TV - Reduced Flange

Ethernet connection system for harsh environment  
Smaller and Lighter



### Description

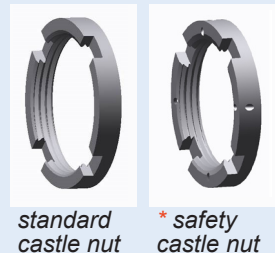
Derived from standard RJF TV, Reduced Flange RJF TV is ideal for applications where small dimensions and lower weight are critical in harsh environments.

RJFTV Reduced flange receptacle is available in Cat5.e, Cat.6 and Cat6A.

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 (MII-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

- Cat.5e : Ethernet Class D per ISO/IEC 11801 and Cat.5e connection for 10 Base-T, 100 Base-TX or 1000 Base-T up to 100 MHz networks per TIA/EIA568B.
- Cat.6 : Ethernet Class E per ISO/IEC 11801 and Cat.6 connection for 10 Base-T, 100 Base-TX or 1000 Base-T up to 250 MHz networks per TIA/EIA568B.
- Cat.6A : Ethernet Class Ea per ISO/IEC 11801 and Cat.6A connection for 10 Base-T, 100 Base-TX, 1000 Base-T, 10GBaseT up to 500 MHz per TIA/EIA568B.

### Markets & Applications



C4ISR, Battlefield, Ground vehicles



Navy



Railway

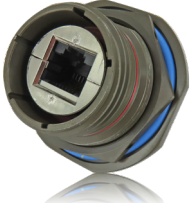
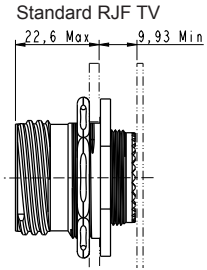
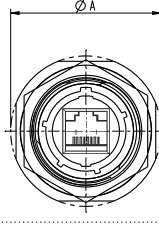
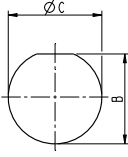

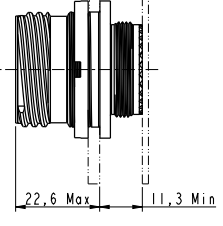
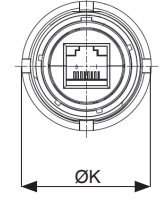
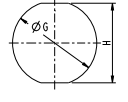


*Applications :*

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

# RJF TV - Reduced Flange

## Smaller Dimensions and 15% lighter

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

## Footprint Saving

41% footprint surface reduction:

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

## Panel Dimension

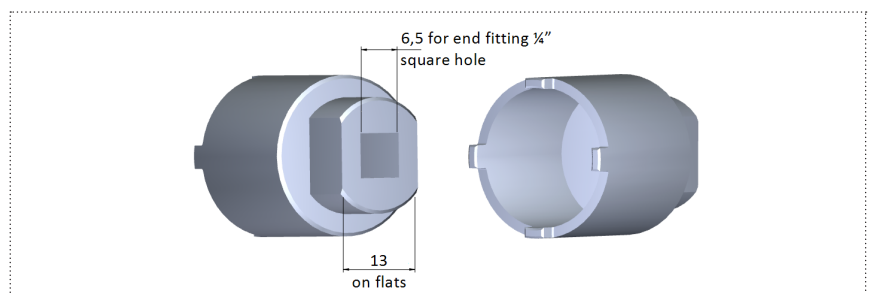
Size	RJF TV Standard		RJF TV Reduced Flange	
	B <sup>0</sup> <sub>-0,25</sub> (mm)	ØC <sup>+0,25</sup> <sub>0</sub> (mm)	ØG <sup>+0,1</sup> <sub>0</sub> (mm)	H <sup>+0,1</sup> <sub>0</sub> (mm)
19	33,91	35,18	33	31,9

## Tools

Need of a specific tool for castle nut:

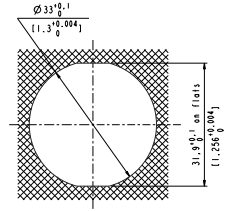
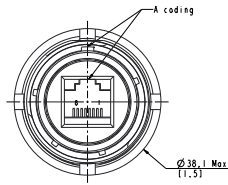
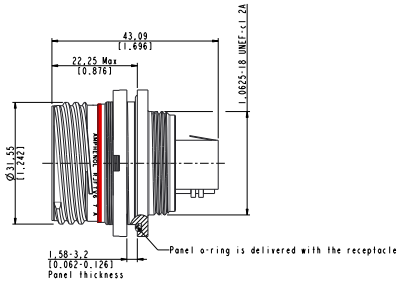
Size	Tool Part Number
19	809686

Max torque value: 10.7 N.m



# RJF TV - Reduced Flange

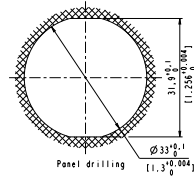
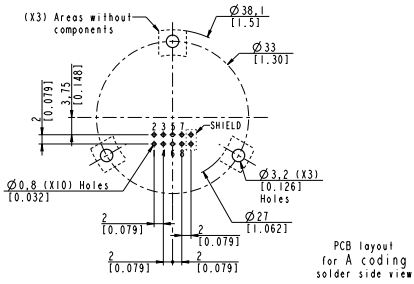
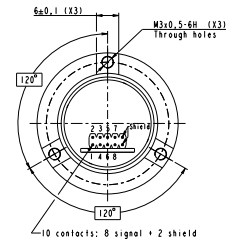
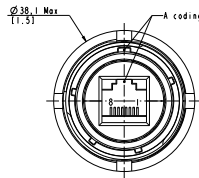
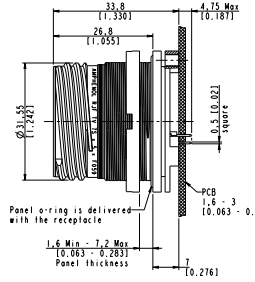
## RJFTV and RJFTV6 reduced flange receptacle



RJF TV 7 1 X F312  
Receptacle CAT5e

RJF TV6 7 X 1 X F312  
Receptacle CAT6

Panel Drilling



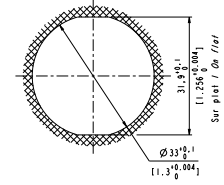
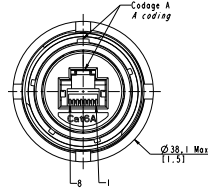
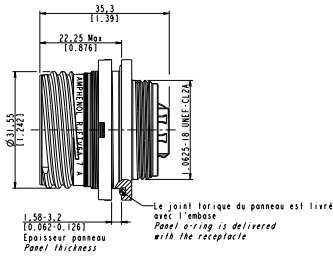
RJF TV 7S X 5 X F059  
Receptacle CAT5e

RJF TV6 7S X 5 X F059  
Receptacle CAT6

Panel Drilling

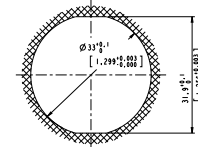
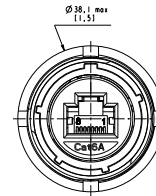
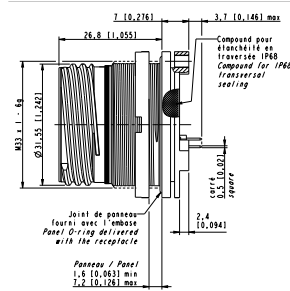
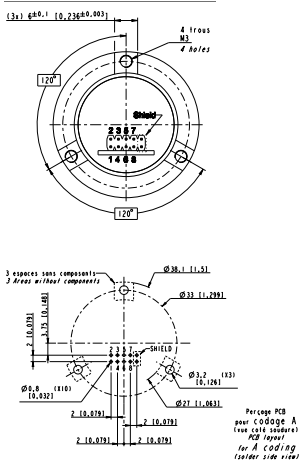
# RJF TV - Reduced Flange

## RJFTV6A reduced flange receptacles



RJF TV6A 7 X 1 X F312  
Receptacle CAT6A

Panel Drilling



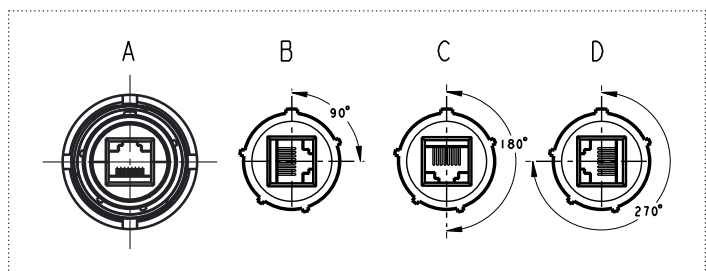
RJF TV6A 7S X 5 X F059  
Receptacle CAT6A

Panel Drilling

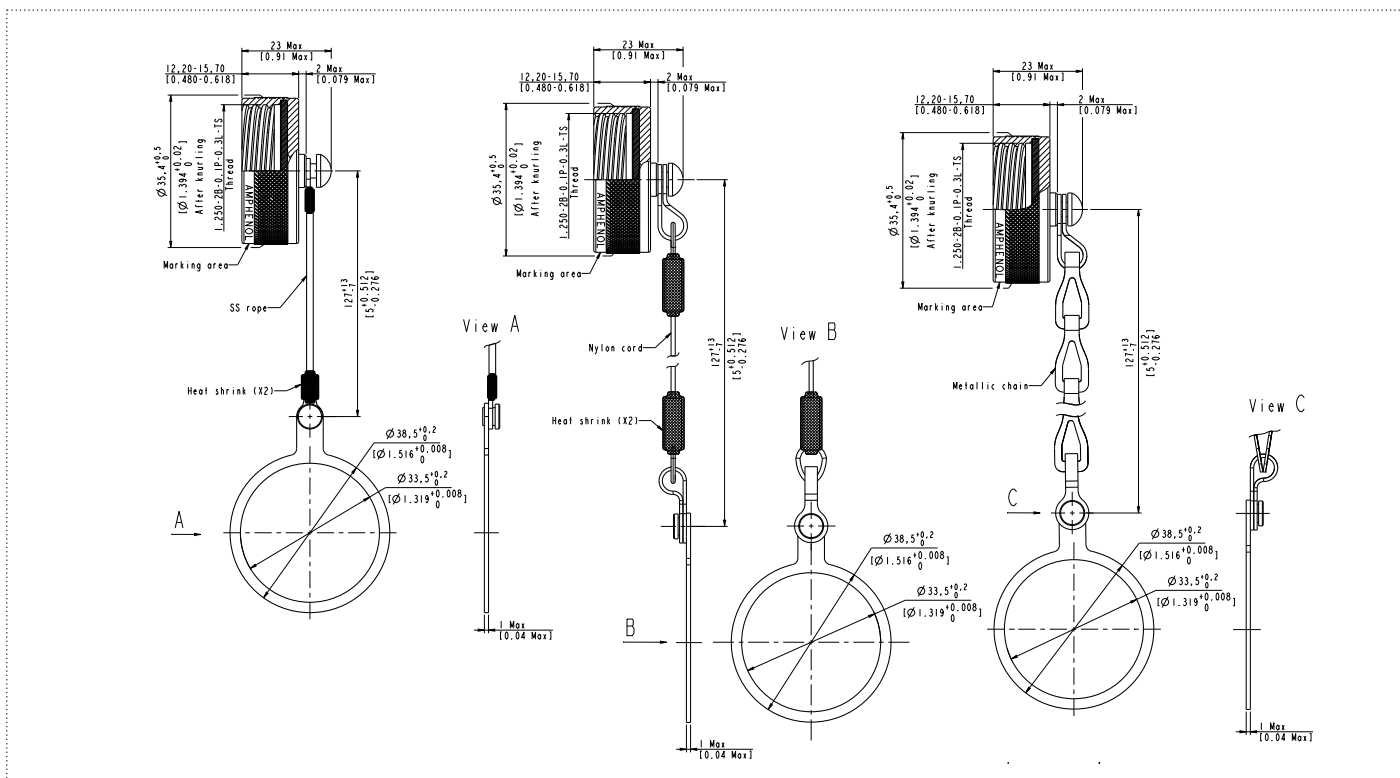
# RJF TV - Reduced Flange

## Coding

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



## Metallic cap for reduced flange receptacle



RJF TVC 7 MR XX F057  
RJF TVC 7 BMR XX F057  
With S.S rope

RJF TVC 7 XX F057  
With nylon rope

RJF TVC 7 M F057  
With metallic chain

# RJF TV - Reduced Flange

## How to order reduced flange receptacle

Series	RJF TV	7	A	1	ZN	F312
<b>Blank:</b> Cat.5e <b>6:</b> Cat.6 <b>6A:</b> Cat.6A  <b>Shell type</b> 7: Jam nut receptacle (mandatory for F312 and F311) 7S: Transversally sealed jam nut receptacle (mandatory for F059 and F058)  <b>Coding</b> (avoid the coding for Cat.5e in F312 version) <b>A, B, C or D</b>  <b>Back termination</b> 1: Female RJ45 5: PC tails (mandatory for F059 and F058)  <b>Shells material &amp; Finish (inserts are metallized)</b> <b>N:</b> Aluminium shell - nickel plating ✓ <b>G:</b> Aluminium shell - olive drab cadmium plating <b>ZN:</b> Aluminium shell - black zinc nickel plating ✓  <b>Deviation</b> <b>F312:</b> Reduced Flange <b>F311:</b> Reduced Flange with safety castle nut <b>F059:</b> Reduced flange Stand-off version <b>F058:</b> Reduced Flange Stand-off version with safety castle nut						

Examples: RJFTV7SA5GF059 ; RJFTV67B1GF311

✓ : RoHS compliant

## How to order metallic cap for reduced flange receptacle

Series	RJF TVC	7	M	ZN	F057
<b>Connector type</b> 7: Jam nut receptacle  <b>Wire type:</b> <b>Blank:</b> Nylon cord <b>M:</b> Metallic chain <b>MR:</b> S.S rope - Transparent (white) teflon jacket <b>BMR:</b> S.S rope - Black teflon jacket  <b>Finish</b> <b>N:</b> Nickel ✓ <b>G:</b> Olive drab cadmium <b>ZN:</b> Black zinc nickel ✓  <b>Deviation</b> <b>F057:</b> Protective cap for reduced flange "TV07" connectors (F058, F059, F311, F312)					

Examples: USBFTVC7NF057 ; USBFTVC7MRZNF057

✓ : RoHS compliant

## Watch our video

### Rugged RJ45 Plug Assembly



Scan  
& discover !



<http://opn.to/a/sTCF4>



# NOTES

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



# NOTES

Area with horizontal dotted lines for taking notes.

