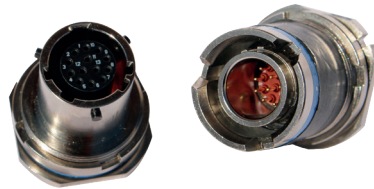


## RNJ Reduced Flange

Smaller Flange for applications where weight & size are critical



**Rack & Panel connector offering realignment & floatability for Blind Mate applications in harsh environments.**

### Main features

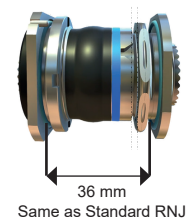
- Derived from MIL-DTL-38999 & standard RNJ, same performances than HE308
- Available for Jam nut plug and receptacle only
- Compatible with RNJ standard range (including Square Flange)
- Available in Aluminum with OD. Cadmium, Nickel or Black Zinc Nickel Plate or Stainless Steel Passivated or Nickel plated
- Higher density on panel & lower weight than Standard RNJ
- Reduced Flange deviation :
  - **F312** for Crimp or Standard PC Tail version / **F311** with safety Castle nut
  - **F059** for Stand off PC Tail version / **F058** with Safety Castle nut
- Available with all 38999 series I & III inserts, including HD ones



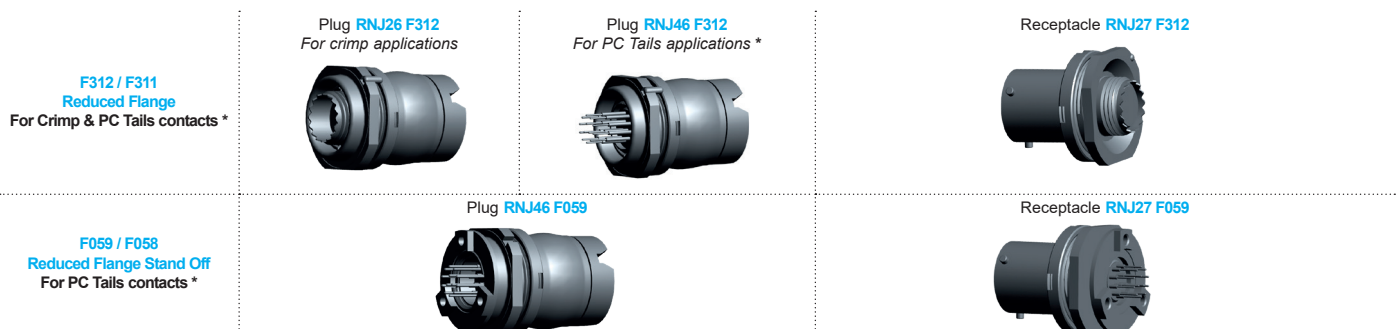
### Realignment axis



### Distance between panels



### RNJ Reduced Flange range



\* Please note that we strongly recommend not using PC Tails on plug unless soldering on flex

### Applications



C4ISR, Battlefield, Ground Vehicles



Missiles & UAVs



Military Avionics

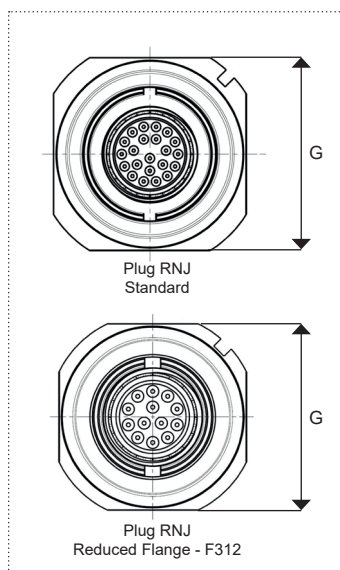


Commercial Avionics

# RNJ REDUCED FLANGE - Dimensions & tooling

## Footprint saving

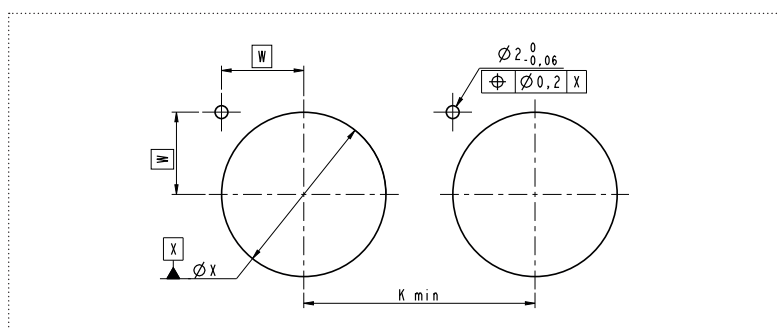
Average 30% Footprint reduction



| Shell Size | Standard RNJ G max (mm) | RNJ F312/F059 G max (mm) | Footprint Reduction |
|------------|-------------------------|--------------------------|---------------------|
| 11         | 32,16                   | 27,03                    | -39,07%             |
| 13         | 35,34                   | 31,03                    | -33,24%             |
| 15         | 38,51                   | 34,53                    | -29,88%             |
| 17         | 41,69                   | 38,53                    | -29,89%             |
| 19         | 46,43                   | 41,53                    | -28,74%             |
| 21         | 49,64                   | 44,53                    | -27,86%             |
| 23         | 52,78                   | 47,53                    | -24,36%             |
| 25         | 54,03                   | 50,53                    | -19,06%             |

Footprint dimensions are the same in Standard & Stand-Off versions

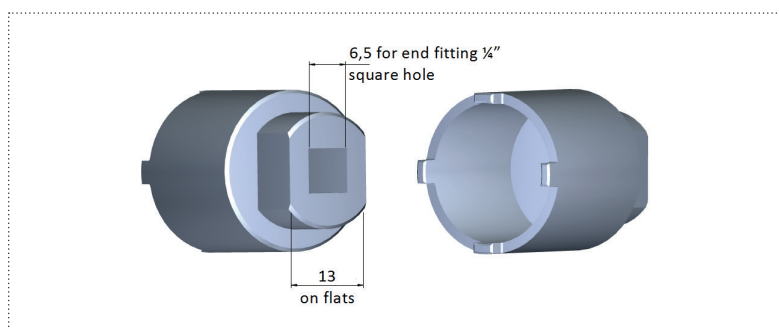
## Panel dimension - Plug & Receptacle



| Shell Size | K min (mm) | W (mm) | ØX <sup>+0,1</sup> (mm) |
|------------|------------|--------|-------------------------|
| 11         | 27,6       | 10,3   | 24                      |
| 13         | 31,6       | 11,7   | 28                      |
| 15         | 35,1       | 12,9   | 31                      |
| 17         | 39,1       | 14,3   | 35                      |
| 19         | 42,1       | 15,4   | 38                      |
| 21         | 45,1       | 16,4   | 41                      |
| 23         | 48,1       | 17,5   | 44                      |
| 25         | 51,1       | 18,6   | 47                      |

## Tooling

Specific tool for the castle nut clamping:



| Shell Size | Tools Part Number |
|------------|-------------------|
| 11         | 809642            |
| 13         | 809643            |
| 15         | 809644            |
| 17         | 809645            |
| 19         | 809646            |
| 21         | 809647            |
| 23         | 809648            |
| 25         | 809649            |

# RNJ REDUCED FLANGE - How to order

For standard configurations, please consult RNJ Catalog.

## Crimp contacts

|        | 1.         | 2.             | 3.              | 4.              | 5.     | 6.                 | 7.                    | 8.        |
|--------|------------|----------------|-----------------|-----------------|--------|--------------------|-----------------------|-----------|
| Series | Shell type | Shell material | Contacts layout | Contacts gender | Keying | Material & plating | w / or w/out contacts | Deviation |
| RNJ    | 27         | T              | 11-35           | P               | N      | 014                | LC                    | F312      |

### 1. Shell type

|    |                    |
|----|--------------------|
| 27 | Jam nut Receptacle |
| 26 | Jam nut Plug       |

### 2. Shell material

|    |                      |
|----|----------------------|
| T  | Aluminum             |
| KE | Stainless steel 303  |
| K  | Stainless steel 316L |

### 3. Contact layout

Size - Layout - Size 11 to 25 - All LJT & TV contacts layouts available.

### 4. Contact gender

|   |        |
|---|--------|
| P | Pin    |
| S | Socket |

### 5. Keying

|   |        |
|---|--------|
| N | Normal |
| A |        |

### 6. Materials and platings

|       | Shell material             | Shell finish        |
|-------|----------------------------|---------------------|
| 014   | Aluminum                   | Olive Drab Cadmium  |
| 033K  |                            | Black Zinc Nickel ✓ |
| 023   | Aluminum & Stainless steel | Nickel ✓            |
| Blank | Stainless steel            | Passivated ✓        |

### 7. With or without contact

|       |                                      |
|-------|--------------------------------------|
| Blank | Connector delivered with contacts    |
| LC    | Connector delivered without contacts |

### 8. Deviations

|      |                                       |
|------|---------------------------------------|
| F312 | Reduced Flange                        |
| F311 | Reduced Flange with safety castle nut |

## PC Tail contacts

|        | 1.         | 2.             | 3.                | 4.              | 5.              | 6.     | 7.                 | 8.        | 9.             |
|--------|------------|----------------|-------------------|-----------------|-----------------|--------|--------------------|-----------|----------------|
| Series | Shell type | Shell material | PC Tails Contacts | Contacts layout | Contacts gender | Keying | Material & plating | Deviation | Contact finish |
| RNJ    | 27         | K              | CI                | 11-35           | P               | N      | 023                | F059      | LFC            |

### 1. Shell type

|    |                    |
|----|--------------------|
| 27 | Jam nut Receptacle |
| 46 | Jam nut Plug*      |

### 2. Shell material

|       |                      |
|-------|----------------------|
| Blank | Aluminum             |
| KE    | Stainless steel 303  |
| K     | Stainless steel 316L |

### 3. PC Tail contacts

|    |                 |
|----|-----------------|
| CI | Standard length |
| LI | Longer PC Tail  |

### 4. Contact layout

Size - Layout - Size 11 to 25 - All LJT & TV contacts layouts available. Size 11 to 25

### 5. Contact gender

|   |        |
|---|--------|
| P | Pin    |
| S | Socket |

### 6. Keying

|   |        |
|---|--------|
| N | Normal |
| A |        |

### 7. Materials and platings

|       | Shell material             | Shell finish        |
|-------|----------------------------|---------------------|
| 014   | Aluminum                   | Olive Drab Cadmium  |
| 033K  |                            | Black Zinc Nickel ✓ |
| 023   | Aluminum & Stainless steel | Nickel ✓            |
| Blank | Stainless steel            | Passivated ✓        |

### 8. Deviations

|      |                                                 |
|------|-------------------------------------------------|
| F312 | Reduced Flange                                  |
| F311 | Reduced Flange with safety castle nut           |
| F059 | Reduced Flange Stand-off                        |
| F058 | Reduced Flange Stand-off with safety castle nut |

### 9. Deviations

|       |                                           |
|-------|-------------------------------------------|
| Blank | Lead - tin tails                          |
| H     | Gold tails ✓                              |
| LF    | Lead free - Tin + Silver tails ✓          |
| LFC   | Lead free - Tin + Silver + Copper tails ✓ |

\* Please note that we strongly recommend not using PC Tails on plug unless soldering on flex

✓ : RoHS compliant

# NOTES

Area with horizontal dotted lines for taking notes.

