# X Amphenol SOCAPEX





# **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

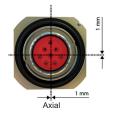






Safety Castle Nut

# Realignement axis







# Distance between panels



# **RNJ Reduced Flange range**

F312 / F311 For Crimp & PC Tails contacts



Plug RNJ46 F312 For PC Tails applications

Receptacle RNJ27 F312



Receptacle RNJ27 F059



For PC Tails contacts



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

# **Applications**





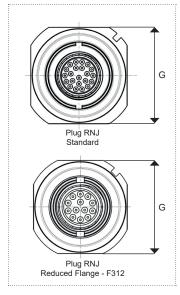




# **RNJ REDUCED FLANGE - Dimensions & tooling**

### **Footprint saving**

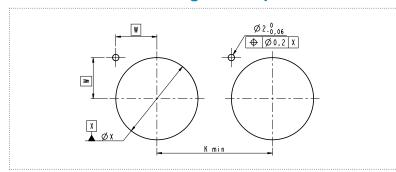
Average 30% Footprint reduction



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

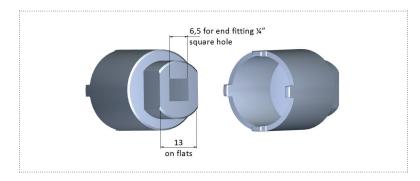
## Panel dimension - Plug & Receptacle



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	Т	11-35	P	N	014	LC	F312

1. Shell t	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. Con	4. Contact gender					
P	Pin					
S	Socket					

5. Key	5. Keying					
N	Normal					
Α						

6. Materials and platings						
	Shell material	Shell finish				
014	Aluminum	Olive Drab Cadmium				
033K	Aluminum	Black Zinc Nickel ✓				
023	Aluminum & Stainless steel	Nickel ✓				
Blank	Stainless steel	Passivated ✓				

7. With c	or without contact
Blank	Connector delivered with contacts
LC	Connector delivered without contacts

8. Deviat	ions
F312	Reduced Flange
F311	Reduced Flange with safety castle nut

#### **PC Tail contacts**

1. 2.

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
5. Contact gender	

6. Keying			
N	Normal		
A			

1. IVIA	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		
Reduced Flange		
Reduced Flange with safety castle nut		
Reduced Flange Stand-off		
Reduced Flange Stand-off with safety castle nut		

9. Deviations		
Blank	Lead - tin tails	
Н	Gold tails ✓	
LF	Lead free - Tin + Silver tails ✓	
LFC	Lead free - Tin + Silver + Copper tails ✓	

Socket

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

<sup>:</sup> RoHS compliant







