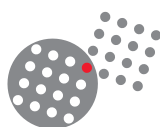


Double Flange Solution for PCB Mount

Specially designed for PCB applications in harsh environments,
decoupling vibration from the board

- Excellent mechanical performances** ✓ Standoffs integrated into the connector. No risk of breaking contacts and no risk of micro-cuts.
- Design flexibility** ✓ Square flange or Jam nut versions available. Versatile contact length options.
- A wide range** ✓ Available in aluminum with a range of layouts from shell size 9 to 25.
- User friendly** ✓ Easy to assemble & time saving.



38999 Series III Double Flange



Description

- High level vibration resistance in harsh environments.
- Offers the same level of performance as the MIL-DTL-38999 Series III connector.
- New receptacle body: Square flange & Jam Nut.
- No risk of breaking contacts.
- No risk of micro-cuts.
- Allow direct grounding from PCB to the flange.
- Standard PC tails contacts: #16, #20 and #22 - as well as specific ones.

Technical features

Mechanical

- **Shell:** Aluminum
 - **Shell plating:**
 - . Cadmium olive drab (W)
 - . Nickel (F)
 - . Black zinc nickel (Z)
 - **Insulator:** Thermoplastic
 - **Grommet and interfacial seal:** Silicone elastomer
 - **Contacts:** Copper alloy
 - **Contacts plating:** Gold over nickel plated
 - **Endurance:** 500 mating/unmating operations whatever the material used
 - **Shock:** 300g, 3 ms according EN 2591-D2 method A
 - **Vibration:**
 - . Sinus:
 - . 10 à 2000 Hz, 3x12 hrs (60g, 140 - 2000 Hz) with T° cycling
 - . Random:
 - . 50 to 2000 Hz, 2x8 Hrs (1g2/ Hz, 100 - 2000Hz) at T° max.
 - . 25 to 2000 Hz, 2x8 Hrs (5g2/ Hz, 100 - 300Hz) at ambient T°
- Test with accessories in acc with EN 2591-D3

Contact retention:

Contact size	22	20	16	12	8	4
Min force in N	44	67	111	111	111	200

Electrical

Test voltage rating (Vrms)

Service	sea level	at 2 1000 m
M	1 300	800
N	1 000	600
I	1 800	1 000
II	2 300	1 000

Contact resistance

Contact size	22	20	16	12	8	4
Resistance mΩ	14.6	7.3	3.8	3.5	3	2

Insulation resistance:

≥ 5 000 MΩ (under 500 Vdc)

Contact rating:

Contact size	22	20	16	12	8	4
Rating (A)	5	7.5	13	23	45	80

Shell continuity:

- . Cadmium olive drab (W): 2.5 Ωh
- . Nickel (F): 1 Ωh
- . Black zinc nickel (Z): 2.5 Ωh

Shielding:

- . F: 65 db at 10 GHz; 85 db at 1 GHz
- . W: 50 db at 10 GHz
- . Z: Consult us

Climatics

Temperature range:

- . W: -65°C +175°C
- . F: -65°C +200°C
- . Z: -65°C +200°C

Sealing:

Mated connectors meet altitude immersion requirements of MIL-DTL-38999.

Salt spray:

- . W: 500 Hrs
- . F: 48 Hrs
- . Z: 500 Hrs

Resistance to fluids

According to MIL-DTL-38999 standard

- . Gasoline: JP5 (OTAN F44)
- . Mineral hydrolic fluid: MIL-H-5606 (OTAN H515)
- . Synthetic hydraulic fluid: Skydrol 500 B4

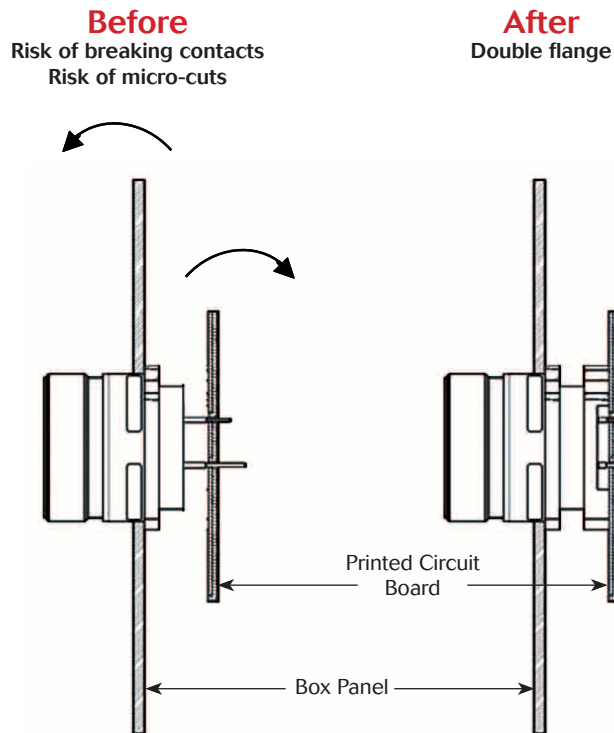
LD4 (SAE AS 1241)

- . Mineral lubricating: MIL-L-7870A (OTAN 0142)
- . Synthetic lubricating: MIL-L-23699 (OTAN 0156), MIL-L-7808
- . Cleaning fluid: MIL-DTL-25769 diluted
- . De-icing fluid: MIL-A-8243
- . Extinguishing fluid: Chlorobromethane
- . Cooling fluid: Coolanol

38999 Series III Double Flange



Comparison



Ordering information

Basic Series	8D	87	11	C	17	W	35	P	N	-
Shell type:										
87: Jam nut receptacle										
Length between panel & PCB *										
Type:										
C: Receptacle with short PC tail										
L: Receptacle with long PC tail										
Shell size:										
9 - 11 - 13 - 15 - 17 - 19 - 21 - 23 - 25										
Plating:										
W: Olive green cadmium										
F: Nickel (ROHS)										
Z: Zinc nickel										
Contact layout:										
Consult Souriau 38999 Series III catalog										
Contact type:										
P: Pin										
S: Socket										
Orientation:										
N, A, B, C, D, E										
Specification:										
None: Standard										
L: Without contacts										
For other specification, please contact us										

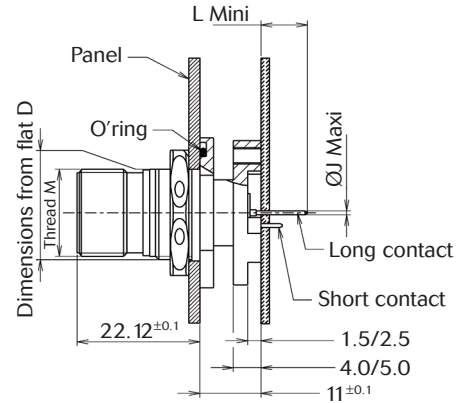
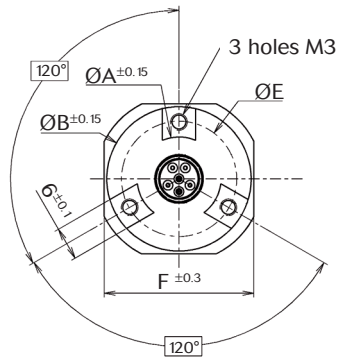
* For other length between panel & PCB please consult us.

38999 Series III Double Flange



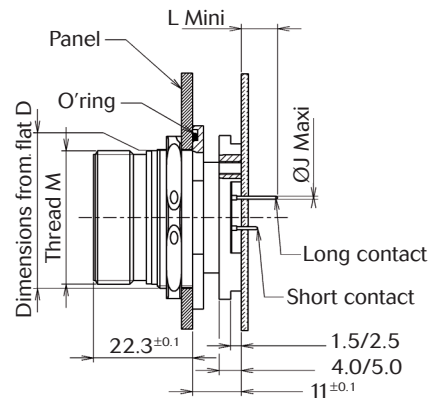
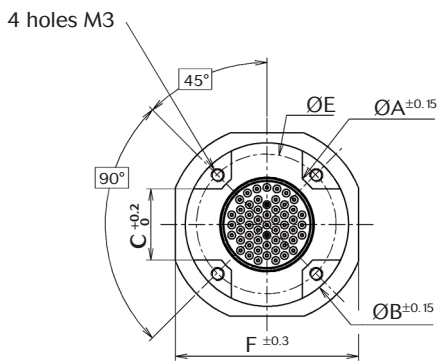
Dimensions

Jam nut receptacle (type 87) - Size 9 & 11



Shell size	$\text{ØA} \pm 0.15$	$\text{ØB} \pm 0.15$	D max.	ØE	$F \pm 0.3$	Thread M
9	15.10	26.00	16.56	20.50	27.01	5/8" UNEF-24
11	19.90	30.80	19.10	25.20	31.81	3/4" UNEF-20

Jam nut receptacle (type 87) - Size 13 to 25



Shell size	$\text{ØA} \pm 0.15$	$\text{ØB} \pm 0.15$	$C_0^{+0.2}$	D max.	ØE	$F \pm 0.3$	Thread M
13	19.90	30.80	12	23.85	25.25	34.91	7/8" UNEF-20
15	23.00	33.90	14	27.00	28.42	38.11	1" UNEF-20
17	26.00	36.80	16	30.20	31.42	41.31	1"3/16 UNEF-18
19	29.50	40.40	18	33.35	35.03	46.01	1"1/4 UNEF-18
21	32.50	43.20	20	36.55	37.82	49.21	1"3/8 UNEF-18
23	35.50	46.50	23	39.70	41.12	52.41	1"1/2 UNEF-18
25	38.60	49.60	25	42.90	44.30	55.61	1"5/8 UNEF-18

All dimensions are in millimeters.

38999 Series III

Double Flange



Straight PC tail contacts

Contact size	Contact type	PC tail length	L min	ØJ max
22D	P	L	7.1	0.7
	S			
	P	C	3.6	
	S			
20	P	L	7.1	0.9
	S			
	P	C	3.6	
	S			
16	P	L	7.1	1.35
	S			
	P	C	3.6	
	S			
12	P	L	-	-
	S			
	P	C	3.6	
	S			

All dimensions are in millimeters.



For further information contact us at contactmilaero@souriau.com
or visit our web site www.souriau.com