

MIL-DTL-38999 Series III Type Environmental Connectors

Performance specifications | material and finish | panel cut-outs

HIGH-SPEED SPACE-GRADE CONNECTORS

PERFORMANCE SUMMARY

Standard Material and Finishes

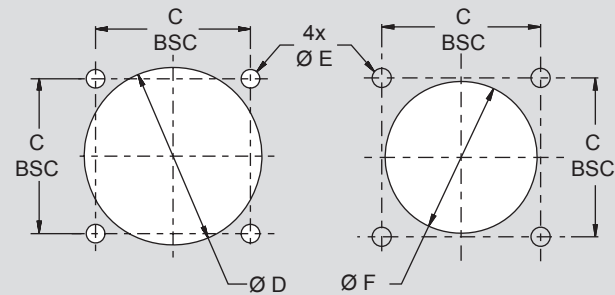
- Shell, barrel and coupling nut: aluminum alloy 6061 per ASTM-B211. Composite jam-nut mount connector is provided with aluminum alloy jam-nut.
- Grounding spring: BeCu alloy/electroless nickel finish
- Insulator: high-grade rigid dielectric. For common ground option, aluminum alloy.
- Seals, grommet, O-ring: fluorosilicone
- Contact: grommet follower ordered separately
- Stainless steel and other materials and finishes available

Shell Type and Sizes

- Shell Type: D38999 Series III Type
- Shell sizes: 9, 11, 13, 17, 19, 21, 23, 25

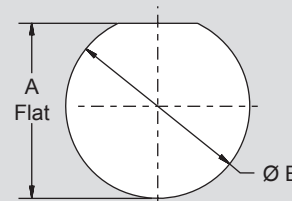
Environmental / Mechanical Performance

- Sealing: IP67 mated condition, when proper backshell is used
- Outgassing: UL94 V0 low smoke, zero halogen
- Operating Temperature Range: -65°C to +200°C
- Vibration: 43.9g's, 3 Axis, 50 - 2000 Hz
- Mechanical Shock: 300 g's
- Backshell Interface: MIL-DTL-38999
- Durability (Mating Cycles): 500



Square Flange Rear Panel Mount

Square Flange Front Panel Mount



Jam Nut

Available Non-Standard Mounting Options	
Sym	Description
00	Receptacle, wall mount with slotted holes
D0	Receptacle, wall mount with round holes
CM	Receptacle, wall mount with metric clinch nuts
CS	Receptacle, wall mount with standard clinch nuts
HM	Receptacle, wall mount with metric helicoil
HS	Receptacle, wall mount with standard helicoil
TM	Receptacle, wall mount with metric tapped holes
TS	Receptacle, wall mount with standard tapped holes

Materials and Finishes		
Sym	Material	Finish Description
ME	Aluminum	Electroless nickel
MT		Ni-PTFE 500 hour nickel fluorocarbon polymer
NF		Cadmium O.D. Over electroless nickel
ZR		Black zinc-nickel over electroless nickel
T0	Titanium	Natural, unplated
TP3		Electro-deposited nickel
Z1	Stainless Steel	Passivate
ZL		Electro-deposited nickel
AB	Marine Bronze	Unplated

Recommended Panel Cut-Out Dimensions								
Shell Size Code	Shell Size	Jam-nut Mount		Square Flange Mount				
		A Flat	B Dia	C BSC	D Dia Min	E Dia Flange Holes	F Dia Min	
A	9	.661/.654 (16.79/16.61)	.703/.693 (17.58/17.60)	.719 (18.26)	.656 (16.66)	.133/.123 (3.38/3.12)	.516 (13.12)	
B	11	.771/.761 (19.58/19.33)	.835/.825 (21.21/20.96)	.812 (20.62)	.796 (20.22)		.625 (15.88)	
C	13	.955/.945 (24.26/24.00)	1.020/1.010 (25.91/25.65)	.906 (23.01)	.922 (23.42)		.750 (19.05)	
D	15	1.085/1.075 (27.56/27.31)	1.145/1.135 (29.08/28.83)	.969 (24.61)	1.047 (26.59)		.906 (23.01)	
E	17	1.210/1.200 (30.73/30.48)	1.270/1.260 (32.26/32.00)	1.062 (26.97)	1.219 (30.96)		1.016 (25.81)	
F	19	1.335/1.325 (33.91/33.66)	1.395/1.385 (35.43/35.18)	1.156 (29.36)	1.297 (32.94)		1.141 (28.98)	
G	21	1.460/1.450 (37.08/36.83)	1.520/1.510 (38.61/38.35)	1.250 (31.75)	1.422 (36.12)		1.266 (32.16)	
H	23	1.585/1.575 (40.26/40.01)	1.645/1.635 (41.78/41.53)	1.375 (34.93)	1.547 (39.29)		.159/.149 (4.04/3.78)	1.375 (34.93)
J	25	1.710/1.700 (43.43/43.18)	1.770/1.760 (44.96/44.70)	1.500 (38.10)	1.672 (42.47)		.155/.145 (3.94/3.68)	1.484 (37.69)