

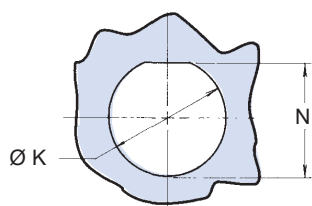
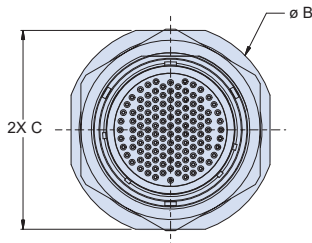
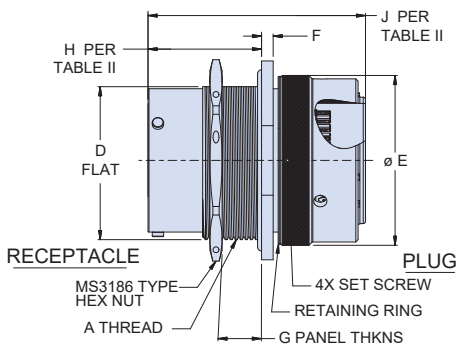
ENVIRONMENTAL CONNECTORS MIL-DTL-38999 Series I Type



231-104-E9 Jam nut mount environmental plug/receptacle bulkhead feed-thru

BULKHEAD FEED-THRU

HOW TO ORDER								
Sample Part Number	231-104	-E9	M	11	-35	P	N	-01
Basic Part Number	231-104 Environmental Bulkhead Feed-Thru							
Shell Style	-E9 = Jam Nut Mount "Sav-Con"							
Material / Finish	M = Aluminum / Electroless Nickel (inactive for new design) ME = Aluminum / Electroless Nicke ZR = Aluminum / Nickel PTFE NF = Cad / O.D. Over Electroless Nicke MT = Aluminum / Ni-PTFE TZ = Aluminum / Tin Zinc MN = Aluminum / Mega Nickel							
Shell Size	09, 11, 13, 15, 17, 19, 21, 23, 25							
Insert Arrangement	Per MIL-DTL-38999 Series I MIL-STD-1560							
Contact Termination	P = Pin on Flange Side PP = Pin to pin				S = Socket on Flange Side SS = Socket to Socket			
Alternate Key Position	A, B, C, D, N = Normal							
Panel Accomodation	See Table II							



RECOMMENDED PANEL CUT-OUT

TABLE I: CONNECTOR DIMENSIONS								
SHELL SIZE	A THREAD CLASS 2A	Ø B	C A/F	D Flat	Ø E Max	F	Ø K	N
9	.6875-24 UNEF	1.204 (30.58)	1.078 (27.38)	.655 (16.64)	.859	.125 (3.18)	.703 (17.86)	.661 (16.79)
		1.172 (29.77)	1.046 (26.57)	.645 (16.38)	(21.82)	.093 (2.36)	.693 (17.60)	.653 (16.59)
11	.8125-20 UNEF	1.391 (35.33)	1.266 (32.16)	0.755 (19.18)	0.984	0.125 (3.18)	0.835 (21.21)	0.771 (19.58)
		1.359 (34.52)	1.234 (31.34)	0.745 (18.92)	(24.99)	0.093 (2.36)	0.825 (20.96)	0.761 (19.33)
13	1.000-20 UNEF	1.516 (38.51)	1.391 (35.33)	0.942 (23.93)	1.156	0.125 (3.18)	1.020 (25.91)	0.955 (24.26)
		1.484 (37.69)	1.359 (34.52)	0.932 (23.67)	(29.36)	0.093 (2.36)	1.010 (25.65)	0.945 (24.00)
15	1.125-18 UNEF	1.641 (41.68)	1.516 (38.51)	1.066 (27.08)	1.281	0.125 (3.18)	1.145 (29.08)	1.085 (27.56)
		1.609 (40.87)	1.484 (37.69)	1.056 (26.82)	(32.54)	0.093 (2.36)	1.135 (28.83)	1.075 (27.31)
17	1.250-18 UNEF	1.766 (44.86)	1.641 (41.68)	1.191 (30.25)	1.406	0.125 (3.18)	1.270 (32.26)	1.210 (30.73)
		1.734 (44.04)	1.609 (40.87)	1.181 (30.00)	(35.71)	0.093 (2.36)	1.260 (32.00)	1.200 (30.48)
19	1.375-18 UNEF	1.954 (49.63)	1.828 (46.43)	1.316 (33.43)	1.516	0.156 (3.96)	1.395 (35.43)	1.335 (33.91)
		1.922 (48.82)	1.796 (45.62)	1.306 (33.17)	(38.51)	0.093 (2.36)	1.385 (35.18)	1.325 (33.66)
21	1.500-18 UNEF	2.078 (52.78)	1.954 (49.63)	1.441 (36.60)	1.641	0.156 (3.96)	1.520 (38.61)	1.460 (37.08)
		2.046 (51.97)	1.922 (48.82)	1.431 (36.35)	(41.68)	0.093 (2.36)	1.510 (38.35)	1.450 (36.83)
23	1.625-18 UNEF	2.204 (55.98)	2.078 (52.78)	1.566 (39.78)	1.766	0.156 (3.96)	1.645 (41.78)	1.585 (40.26)
		2.172 (55.17)	2.046 (51.97)	1.556 (39.52)	(44.86)	0.093 (2.36)	1.635 (41.53)	1.575 (40.01)
25	1.750-18 UNS	2.328 (59.13)	2.204 (55.98)	1.691 (42.95)	1.891	0.156 (3.96)	1.770 (44.96)	1.710 (43.43)
		2.296 (58.32)	2.172 (55.17)	1.681 (42.70)	(48.03)	0.093 (2.36)	1.760 (44.70)	1.700 (43.18)

TABLE II: PANEL ACCOMMODATION			
SYM	G	H MAX	J MAX
01	.062-.125	.920	2.050
02	.062-.250	1.050	2.250
03	.062-.500	1.300	2.400

NOTES

- Material/finish: Shell assembly, coupling nut, jam nut, lock ring—Aluminum Alloy, See Part Number Development
- Retaining ring—Ni-Al bronze/clean only
- Contacts—Copper alloy/gold plate
- Bayonet pins, wave washer—CRES/passivate
- O-Ring, interfacial and peripheral seals—fluorosilicone blend/N.A.
- Insulators—High grade rigid dielectric/N.A.
- Ground Ring—Beryllium copper/gold plate