

RATIONALE

THIS DETAIL SPECIFICATION SHEET IS WRITTEN TO PERMIT THE CANCELLATION AND SUPERSESSION OF MIL-C-81511/25 WITH THIS DOCUMENT.

NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS81511.

AS81511/25

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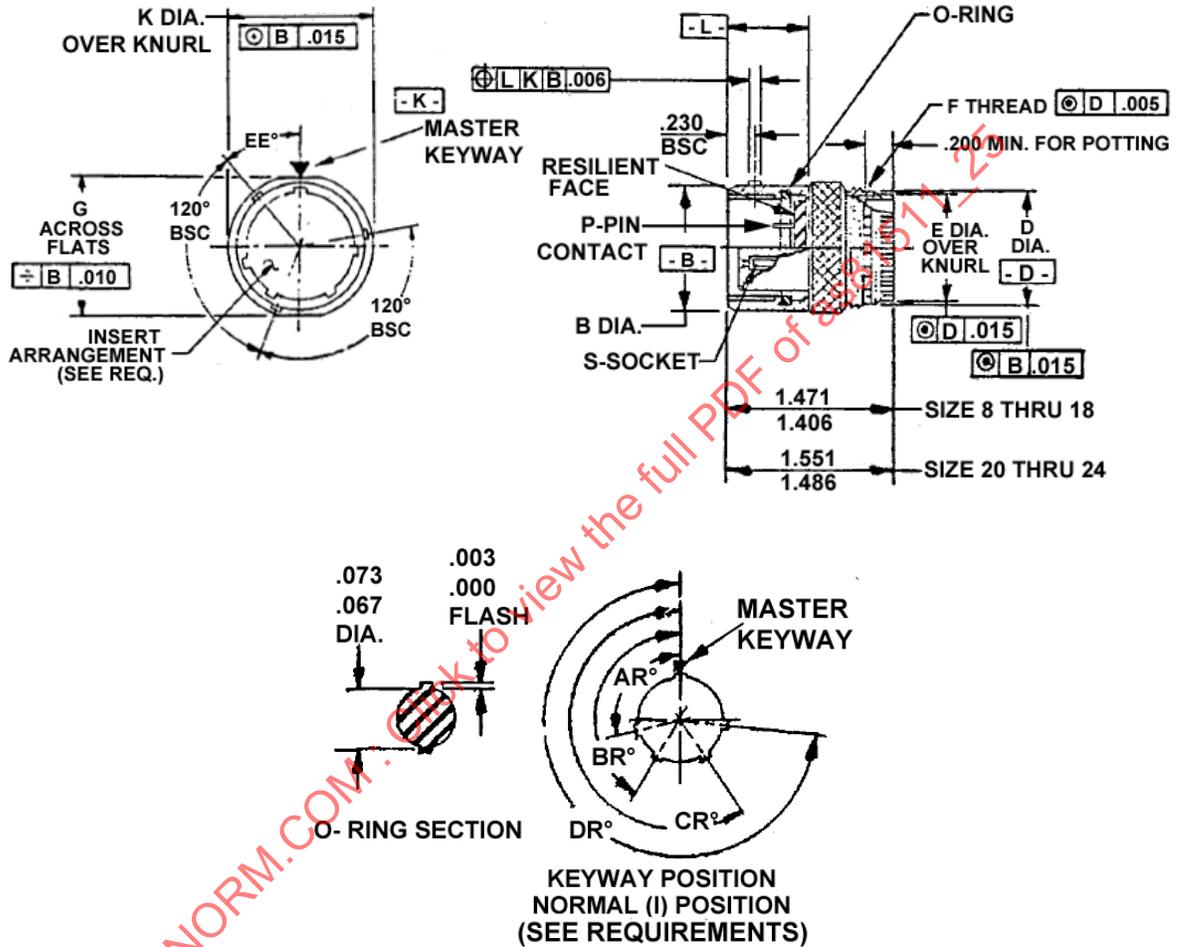
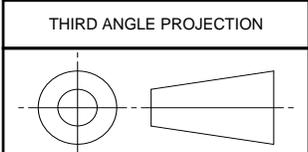


FIGURE 1 - CONNECTOR RECEPTACLE, CABLE CONNECTING

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CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS81511



AEROSPACE STANDARD

CONNECTOR, RECEPTACLE, CABLE CONNECTING, ELECTRICAL, CIRCULAR, HIGH DENSITY, QUICK DISCONNECT, ENVIRONMENT RESISTING, CRIMP TYPE CONTACTS (CLASS A, F, AND E - SERIES 1)

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SHEET 1 OF 4

TABLE 1 - FIGURE 1 METRIC EQUIVALENTS

INCHES	MILLIMETERS	INCHES	MILLIMETERS	INCHES	MILLIMETERS	INCHES	MILLIMETERS
.003	0.08	.067	1.70	.230	5.84	1.471	37.36
.005	0.13	.073	1.85	.685	17.40	1.531	38.89
.006	0.15	.090	2.29	.705	17.91		
.010	0.25	.094	2.39	1.406	35.71		
.015	0.38	.200	5.08	1.436	36.47		

TABLE 2 - FIGURE 1 DIMENSIONS/CONFIGURATION

SHELL SIZE	B Ø	D Ø	E Ø	F THREAD	G ACROSS FLATS	K Ø	L ACROSS FLAT	N THREAD	P Ø	LL
8	.553 (14.05)	.430 (10.92)	.422 (10.72)	1/2-28UNEF-2A	.989 (25.12)	1.072 (27.23)	.598 (15.19)	5/8-20UN-2A	.640 (16.26)	.610 (15.49)
	.547 (13.89)	.424 (10.77)	.407 (10.34)		.969 (24.61)	1.052 (26.72)	.590 (14.99)		.630 (16.00)	.600 (15.24)
	.678 (17.22)	.555 (14.10)	.548 (13.92)		1.114 (28.30)	1.197 (30.40)	.723 (18.36)		.765 (19.43)	.735 (18.67)
10	.672 (17.07)	.549 (13.94)	.533 (13.54)	5/8-28UN-2A	1.094 (27.79)	1.177 (29.90)	.715 (18.16)	3/4-20UNEF-2A	.755 (19.18)	.725 (18.42)
	.928 (23.57)	.805 (20.45)	.798 (20.27)		1.401 (35.59)	1.510 (38.35)	.973 (24.71)		1.015 (25.78)	.985 (25.02)
	.922 (23.42)	.799 (20.29)	.783 (19.89)		1.381 (35.08)	1.490 (37.85)	.965 (24.51)		1.005 (25.53)	.975 (24.77)
14	1.054 (26.77)	.930 (23.63)	.924 (23.47)	1-28UN-2A	1.526 (38.76)	1.635 (41.53)	1.098 (27.89)	1 1/8-20UN-2A	1.140 (28.96)	1.110 (28.19)
	1.048 (26.62)	.924 (23.47)	.909 (23.09)		1.506 (38.25)	1.615 (41.02)	1.090 (27.69)		1.130 (28.70)	1.100 (27.94)
	1.178 (29.92)	1.055 (26.80)	1.048 (26.62)		1.651 (41.94)	1.745 (44.32)	1.222 (31.04)		1.265 (32.13)	1.235 (31.37)
18	1.172 (29.77)	1.049 (26.64)	1.033 (26.24)	1 1/8-28UN-2A	1.631 (41.43)	1.725 (43.82)	1.214 (30.84)	1 1/4-20UN-2A	1.255 (31.88)	1.225 (31.12)
	1.303 (33.10)	1.180 (29.97)	1.173 (29.79)		1.776 (45.11)	1.870 (47.50)	1.347 (34.21)		1.390 (35.31)	1.360 (34.54)
	1.297 (32.94)	1.174 (29.82)	1.158 (29.41)		1.756 (44.60)	1.850 (46.99)	1.339 (34.01)		1.380 (35.05)	1.350 (34.29)
22	1.428 (36.27)	1.305 (33.15)	1.298 (32.97)	1 3/8-28UN-2A	1.901 (48.29)	1.995 (50.67)	1.472 (37.39)	1 1/2-20UN-2A	1.515 (38.48)	1.485 (37.72)
	1.422 (36.12)	1.299 (32.99)	1.283 (32.59)		1.881 (47.78)	1.975 (50.17)	1.464 (37.19)		1.505 (38.23)	1.475 (37.47)
	1.553 (39.45)	1.430 (36.32)	1.423 (36.14)		2.026 (51.46)	2.120 (53.85)	1.597 (40.56)		1.640 (41.66)	1.610 (40.89)
24	1.547 (39.29)	1.424 (36.17)	1.408 (35.76)	1 1/2-28UN-2A	2.006 (50.95)	2.100 (53.34)	1.589 (40.36)	1 5/8-20UN-2A	1.630 (41.40)	1.600 (40.64)

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TABLE 2A - FIGURE 1 DIMENSIONS/CONFIGURATION

SHELL SIZE	AR° BSC	BR° BSC	CR° BSC	DR° BSC	PANEL O-RING	EE° BSC POSITION					
						1	2	3	4	5	6
						8	105°	140°	215°	265°	AS3582-018
10	95°	141°	208°	236°	AS3582-020	53	87	51	77	87	87
14	95°	141°	208°	236°	AS3582-024	53	87	51	77	87	87
16	80°	142°	196°	293°	AS3582-026	98	98	98	98	98	98
18	80°	142°	196°	293°	AS3582-028	98	98	98	98	98	98
20	80°	142°	196°	293°	AS3582-029	98	98	98	98	98	98
22	80°	142°	196°	293°	AS3582-030	98	98	98	98	98	98
24	80°	142°	196°	293°	AS3582-031	98	98	98	98	98	98

REQUIREMENTS: ALL REQUIREMENTS SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS81511.

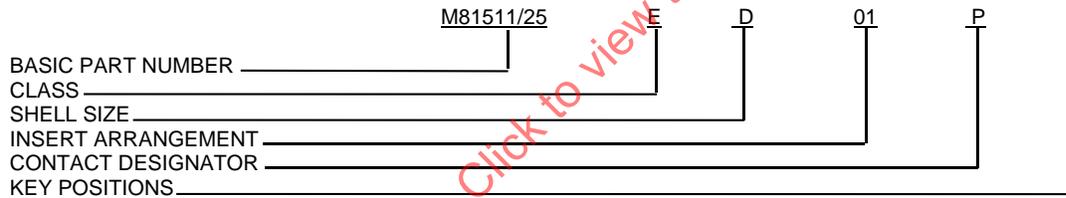
1. DESIGN:

CONNECTORS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE 1 AND TABLE 2. DIMENSIONS ARE IN INCHES AND APPLY AFTER PLATING. METRIC EQUIVALENTS ARE GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED ON 1 INCH = 25.4 MM. UNLESS OTHERWISE SPECIFIED, TOLERANCES ARE ±.016 INCHES. NORMAL MATING KEYWAY POSITION SHOWN IN FIGURE 1. FOR ALTERNATE KEYWAY POSITIONS, SEE AS81511, FIGURE 8. SLOTTED NUT SHALL CONFORM TO AS81511/20.

2. FOR INSERT ARRANGEMENTS, SEE AS81511, APPENDIX A.

3. PART NUMBER:

THE CONNECTOR PART NUMBER WILL CONSIST OF THE LETTER M, THE BASIC SPECIFICATION NUMBER/APPLICABLE SPECIFICATION SHEET, AND THE APPLICABLE ALPHA-NUMERIC CHARACTERS ON THE CONNECTOR SHELL. THE PART NUMBER SHALL BE FORMULATED AS IN THE FOLLOWING EXAMPLE: M81511/25ED01P1.



4. SHELL POLARIZATION:

1 THROUGH 6 KEY POSITION.

5. INSERTION AND REMOVAL TOOLS:

AS81969/2 INSERTION TOOL, AS81969/3 REMOVAL TOOL.

6. MATING CONNECTOR:

THIS RECEPTACLE MATES DIRECTLY WITH AN AS81511/26 PLUG.

7. CONNECTOR WEIGHT:

THE CONNECTOR REFERENCE WEIGHTS ARE LISTED IN TABLE 3.