

RATIONALE

THIS DETAIL SPECIFICATION SHEET IS WRITTEN TO PERMIT THE CANCELLATION AND SUPERSESSION OF MIL-C-81511/1 WITH THIS DOCUMENT.

NOTICE

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

AS81511/1

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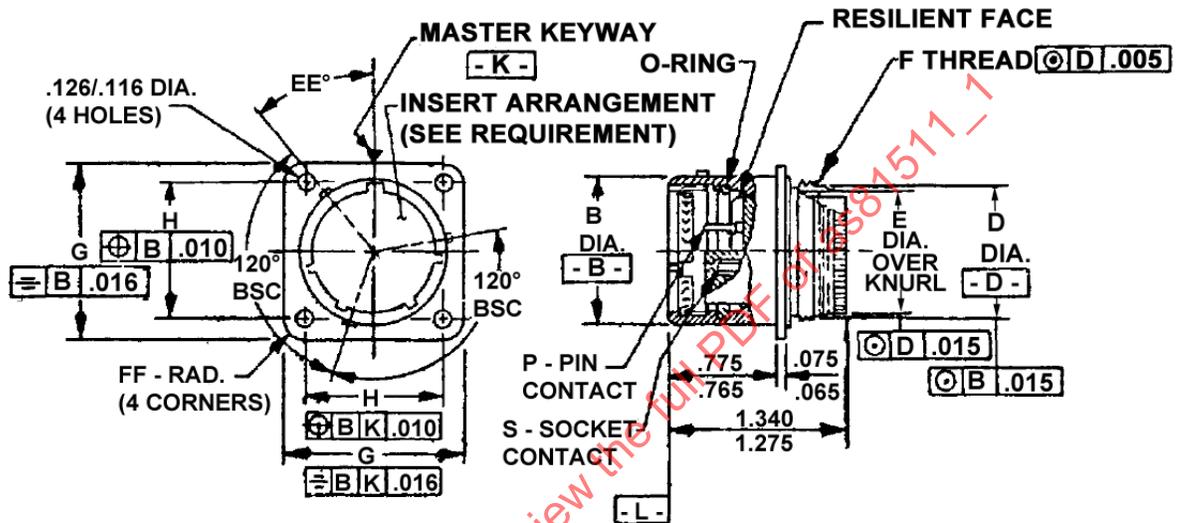
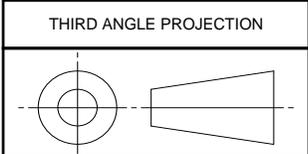


FIGURE 1 CONNECTOR RECEPTACLE

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CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS81511



AEROSPACE STANDARD

CONNECTOR, RECEPTACLE, FLANGE MOUNT, ELECTRICAL, CIRCULAR, HIGH DENSITY, QUICK DISCONNECT, ENVIRONMENT RESISTING, CRIMP TYPE CONTACTS AND ACCESSORIES (CLASS A, F, AND E - SERIES 2)

AS81511/1
SHEET 1 OF 4

ISSUED 2014-10

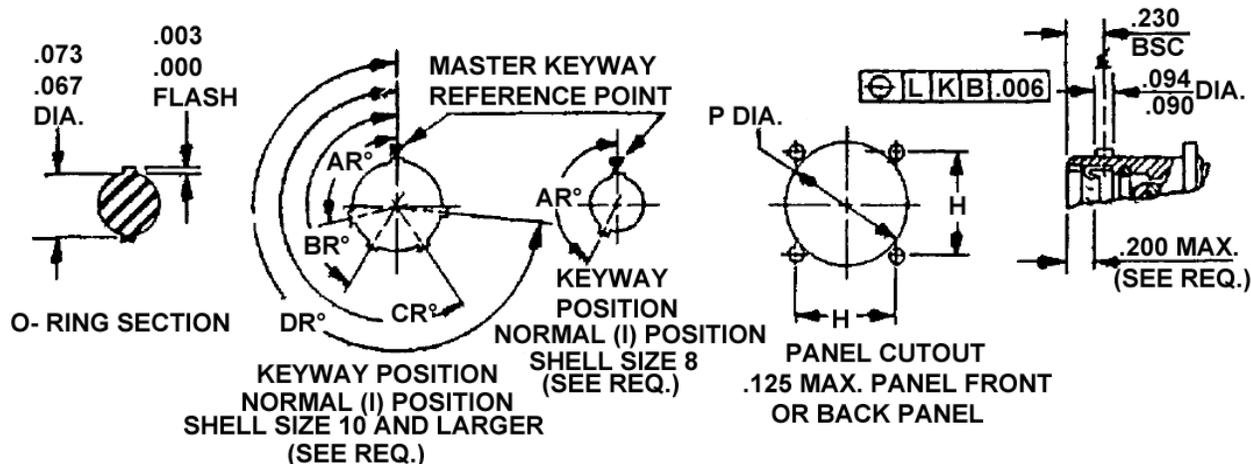


FIGURE 1A - CONNECTOR RECEPTACLE (CONTINUED)

TABLE 1 - FIGURE 1 METRIC EQUIVALENTS

INCHES	MILLIMETERS								
.003	0.08	.016	0.41	.090	2.29	.200	5.08	1.340	34.04
.005	0.13	.065	1.65	.094	2.39	.230	5.84		
.006	0.15	.067	1.70	.116	2.95	.765	19.43		
.010	0.25	.073	1.85	.125	3.18	.775	19.69		
.015	0.38	.075	1.91	.126	3.20	1.275	32.39		

TABLE 2 - FIGURE 1 DIMENSIONS

SHELL SIZE	B Ø	D Ø	E Ø	F THREAD	G	H	P Ø	AR° BSC	BR° BSC	CR° BSC	DR° BSC	FF RADIUS	EE° BSC POSITION						
													1	2	3	4	5	6	
8	.553	.430	.422	1/2-28UNEF-2A	.820	.599	.640	128°	--	--	--	.120 (3.05)	40	40	40	40	40	40	
	(14.05)	(10.92)	(10.72)		(20.83)	(15.21)	(16.26)												.100 (2.54)
	.547	.424	.407		.804	.589	.630												(20.42)
10	.678	.555	.548	5/8-28UN-2A	.945	.724	.765	105°	140°	215°	265°	.120 (3.05)	60	46	46	60	89	60	
	(17.22)	(14.10)	(13.92)		(24.00)	(18.39)	(19.43)												.100 (2.54)
	.672	.549	.533		.929	.714	.755												(23.60)
14	.928	.805	.798	7/8-28UN-2A	1.133	.911	1.015	105°	140°	215°	265°	.120 (3.05)	60	46	46	60	89	60	
	(23.57)	(20.45)	(20.27)		(28.78)	(23.14)	(25.78)												.100 (2.54)
	.922	.799	.783		1.117	.901	1.005												(28.37)
16	1.054	.930	.924	1-28UN-2A	1.258	.974	1.140	105°	140°	215°	265°	.150 (3.81)	50	50	50	50	50	50	
	(26.77)	(23.63)	(23.47)		(31.95)	(24.74)	(28.96)												.130 (3.30)
	1.048	.924	.909		1.242	.964	1.130												(31.55)
18	1.178	1.055	1.048	1 1/8-28UN-2A	1.351	1.067	1.265	105°	140°	215°	265°	.150 (3.81)	50	50	50	50	50	50	
	(29.92)	(26.80)	(26.62)		(34.32)	(27.10)	(32.13)												.130 (3.30)
	1.172	1.049	1.033		1.335	1.057	1.255												(33.91)

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

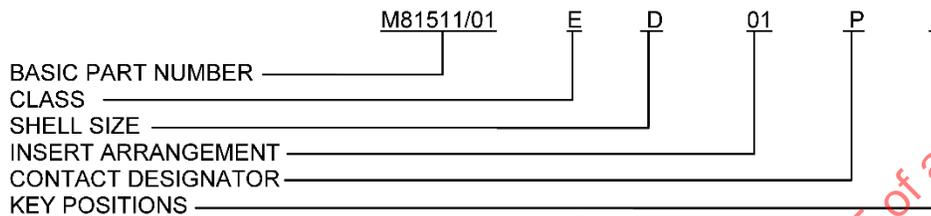
1. DESIGN:

CONNECTORS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE 1 AND TABLE 2. DIMENSIONS ARE IN INCHES AND ARE AFTER PLATING. METRIC EQUIVALENTS ARE GIVEN FOR INFORMATION ONLY AND ARE BASED ON 1 INCH = 25.4 MM. UNLESS OTHERWISE SPECIFIED, TOLERANCES ARE ±.016 INCHES. THE NORMAL MATING KEYWAY POSITION IS SHOWN IN FIGURE 1 AND 1A. FOR ALTERNATE KEYWAY POSITIONS, SEE AS81511 FIGURE 4. THE .200 MAX. DIMENSION IN FIGURE 1A IS THE DISTANCE FROM THE FRONT OF THE SHELL TO THE POINT AT WHICH A GAGE PIN, HAVING THE SAME BASIC DIAMETER AS THE PLUG SHELL, ENGAGES THE SPRING MEMBER. CONNECTORS ARE SERIES 2, CLASSES ARE A, F AND E. CONTACTS ARE CRIMP TYPE REMOVABLE, STYLE P AND S.

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: M81511/01ED01P1.



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 AS81511/6 PLUG.

7. CONNECTOR WEIGHT:

THE CONNECTOR REFERENCE WEIGHTS ARE LISTED IN TABLE 3.

TABLE 3 - CONNECTOR WEIGHT

SHELL SIZE	WEIGHT (REFERENCE - POUNDS) ^{1/}
18 (CODE F)	.071
16 (CODE E)	.064
14 (CODE D)	.050
10 (CODE B)	.030
8 (CODE A)	.023

^{1/} CONTACTS NOT INCLUDED IN WEIGHT.

APPLICATION NOTES:

- FOR SHELL SIZES 20, 22, AND 24, USE AS81511/21 CONNECTORS.
- AS81511 CONNECTORS AND ACCESSORIES ARE NOT RECOMMENDED FOR NEW DESIGN.

	AEROSPACE STANDARD	AS81511/1 SHEET 3 OF 4	
	CONNECTOR, RECEPTACLE, FLANGE MOUNT, ELECTRICAL, CIRCULAR, HIGH DENSITY, QUICK DISCONNECT, ENVIRONMENT RESISTING, CRIMP TYPE CONTACTS AND ACCESSORIES (CLASS A, F, AND E - SERIES 2)		