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REV. B
AS31491™

FEDERAL SUPPLY CLASS
5935

RATIONALE

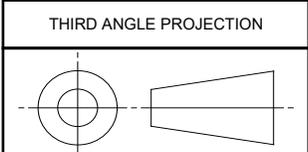
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CUSTODIAN: AE-8/AE-8C1		PROCUREMENT SPECIFICATION: AS81703	
	AEROSPACE STANDARD		AS31491™
	CONNECTOR, RECEPTACLE, ELECTRIC, HERMETIC CRIMP TYPE, SINGLE HOLE MOUNTING PUSH-PULL COUPLING, SERIES 3 (CLASS N)		

ISSUED 2004-06 REVISED 2011-08 REAFFIRMED 2016-10 STABILIZED 2021-05

THE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE LATEST ISSUE OF SAE AS81703.

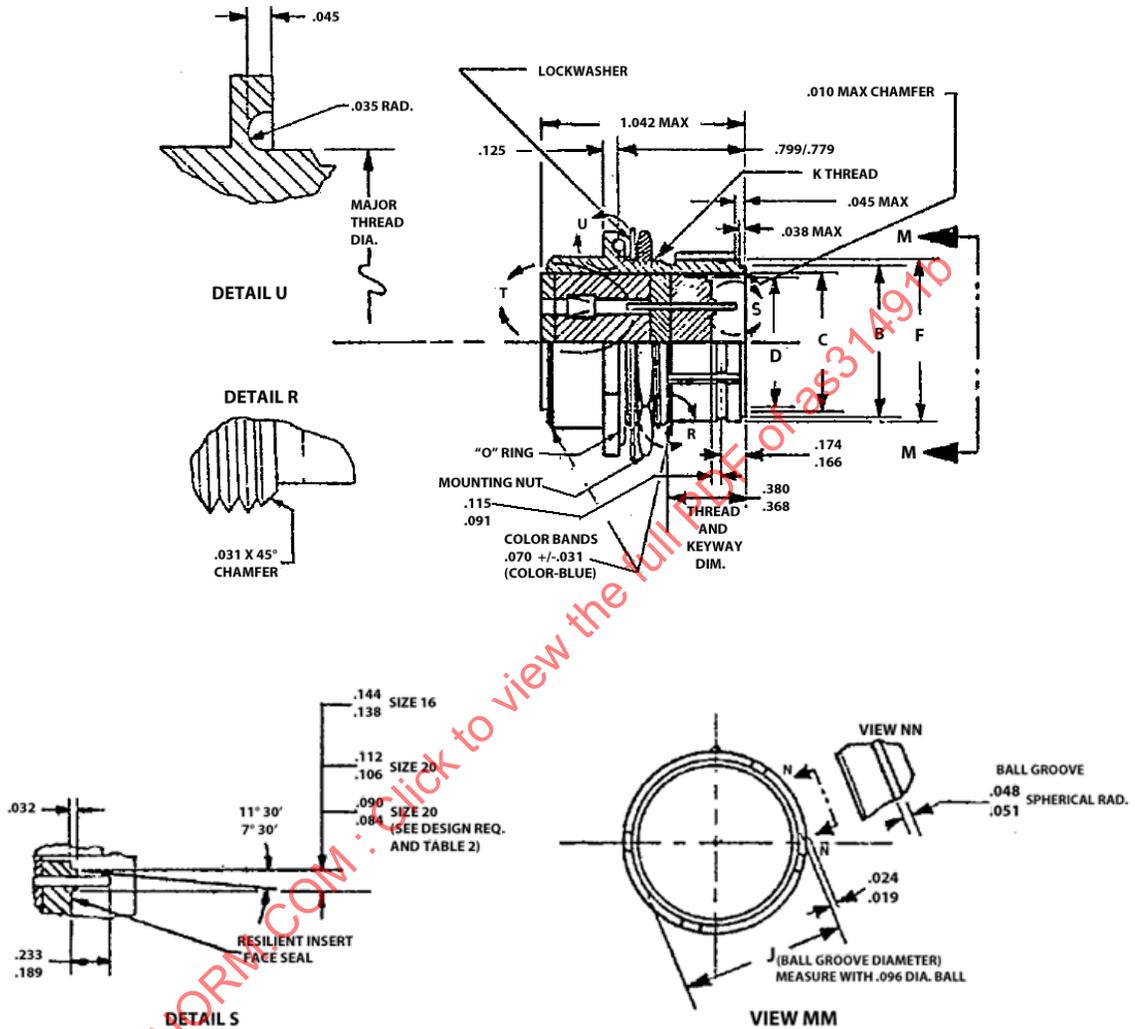


FIGURE 1 – CONNECTOR CONFIGURATIONS AND DIMENSIONS

	AEROSPACE STANDARD	AS31491™ SHEET 1 OF 5	REV. B
	CONNECTOR, RECEPTACLE, ELECTRIC, HERMETIC CRIMP TYPE, SINGLE HOLE MOUNTING PUSH-PULL COUPLING, SERIES 3 (CLASS N)		

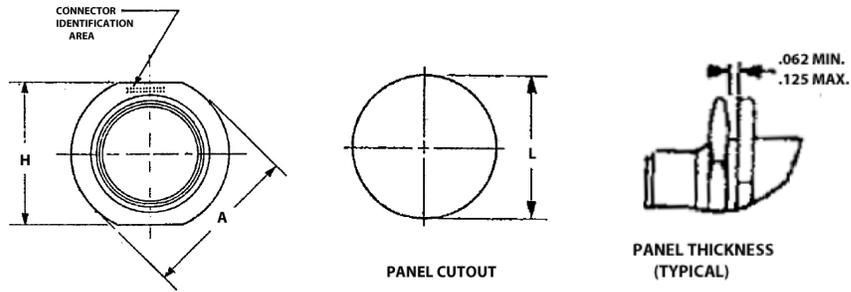


FIGURE 2 – CONNECTOR CONFIGURATIONS AND DIMENSIONS (CONTINUED)

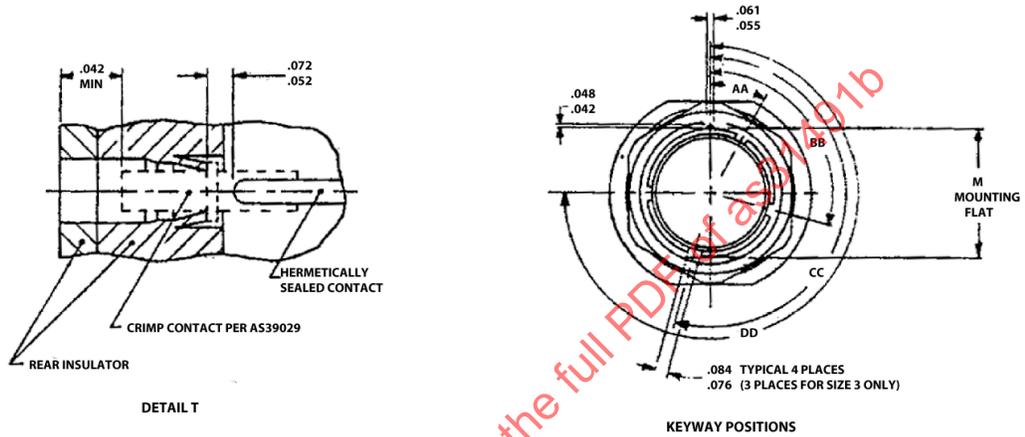


FIGURE 3 – CONNECTOR CONFIGURATIONS AND DIMENSIONS (CONTINUED)

TABLE 1 – FIGURE 1 AND 2 DIMENSIONS

SHELL SIZE DASH NO.	A DIA.	B DIA.	C SHELL I.D.	D MAX. INSERT O.D.	F DIA.	H	J	K THREAD	L	M
-3	.785 .755	.392 .385	.367 .356	.330	.441 .431	.742 .712	.399 .391	9/16-24 UNEF-2A	.577	.523
-7	.905 .875	.527 .520	.483 .473	.451	.576 .566	.867 .837	.534 .526	11/16-24 UNEF-2A	.702	.655
-12	1.030 1.000	.661 .654	.624 .614	.553	.710 .700	.992 .962	.669 .661	13/16-20 UNEF-2A	.827	.788
-19	1.218 1.188	.800 .793	.763 .753	.738	.849 .839	1.180 1.150	.807 .799	1-20 UNEF-2A	1.015	.963
-27	1.343 1.313	.955 .948	.918 .908	.854	1.004 .994	1.305 1.275	.962 .954	1 1/8-18 UNEF-2A	1.140	1.089
-37	1.467 1.437	1.077 1.070	1.040 1.030	.976	1.126 1.116	1.430 1.400	1.084 1.076	1 1/4-18 UNEF-2A	1.265	1.214



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PUSH-PULL COUPLING, SERIES 3 (CLASS N)

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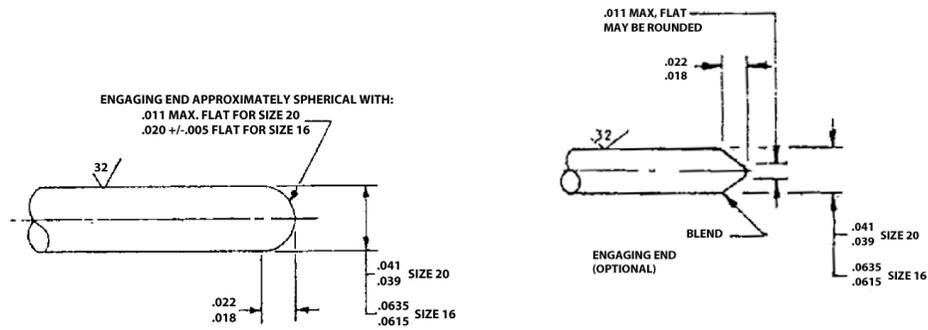


FIGURE 4 – CONTACT CONFIGURATIONS AND DIMENSIONS

TABLE 2 – INSERT ARRANGEMENTS REQUIRING REDUCED DIAMETER SEAL BARRIER

INSERT ARRANGEMENTS REQUIRING REDUCED DIAMETERS FOR PIN CONTACT RAISED SEAL BARRIERS (APPLICABLE TO THE .090/.084 SIZE 20 DIAMETER IN DETAIL S)		
SHELL SIZE	INSERT ARRANGEMENT	CONTACT CAVITIES
12	12-50	5, 6, 8, 9, 11 AND 12

TABLE 3 – KEYWAY POSITIONS

SHELL SIZE DASH NO.	AA	BB	CC	DD
-3	23 DEGREES	97 DEGREES	187 DEGREES	N/A
-7	23 DEGREES	97 DEGREES	187 DEGREES	277 DEGREES
-12	30 DEGREES	105 DEGREES	195 DEGREES	270 DEGREES
-19	30 DEGREES	105 DEGREES	195 DEGREES	270 DEGREES
-27	30 DEGREES	105 DEGREES	195 DEGREES	270 DEGREES
-37	30 DEGREES	105 DEGREES	195 DEGREES	270 DEGREES

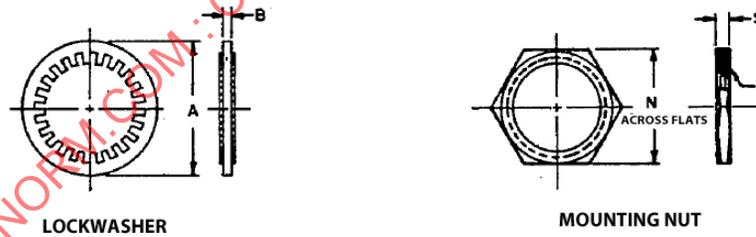


FIGURE 5 – LOCKWASHER AND MOUNTING NUT CONFIGURATIONS AND DIMENSIONS

TABLE 4 – FIGURE 5 DIMENSIONS

CONNECTOR SHELL SIZE DASH NO.	LOCKWASHER		MOUNTING NUT			"O" RING
	A	B +.005/-.007	N	S THICKNESS	T THREAD SIZE	PART NUMBER
-3	.770	.015	.625	.125	9/16-24 UNEF	MS29513-15
-7	.955		.812		11/16-24 UNEF	MS29513-17
-12	1.062		.937		13/16-20 UNEF	MS29513-19
-19	1.192		1.062		1-20 UNEF	MS29513-22
-27	1.438		1.250		1 1/8-18 UNEF	MS29513-24
-37			1.375		1 1/4-18 UNEF	MS29513-26