

REV.
A

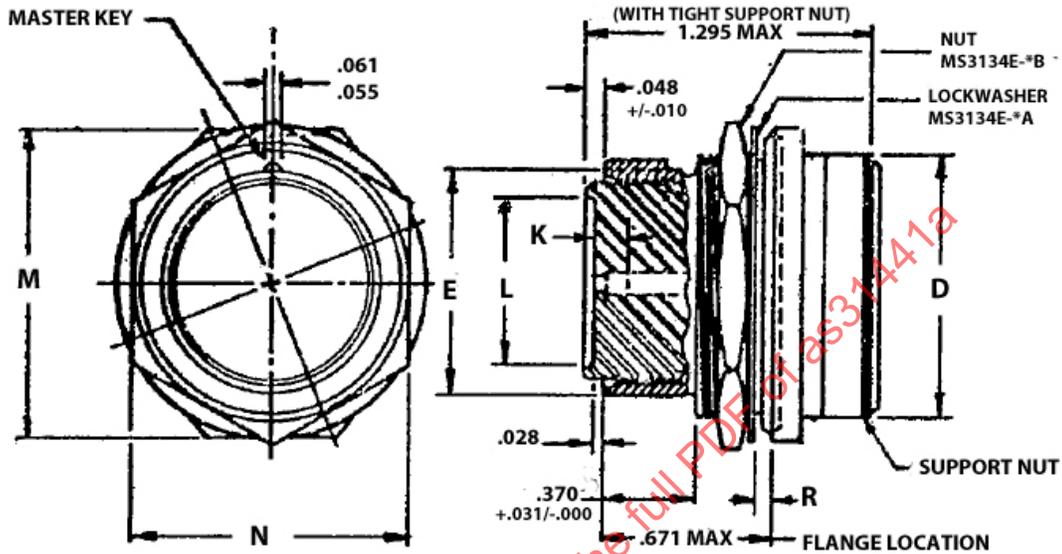
AS31441™

FEDERAL SUPPLY CLASS
5935

RATIONALE

AS31441A HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

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

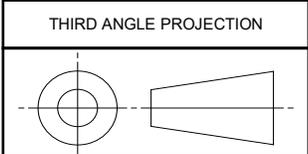


STYLE S (SOCKET INSERT)

FIGURE 1 – CONNECTOR CONFIGURATIONS AND DIMENSIONS (CLASS E)

SAENORM.COM : Click to view the full PDF of AS31441A

For more information on this standard, visit
<https://www.sae.org/standards/content/AS31441A/>



CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS81703



AEROSPACE STANDARD

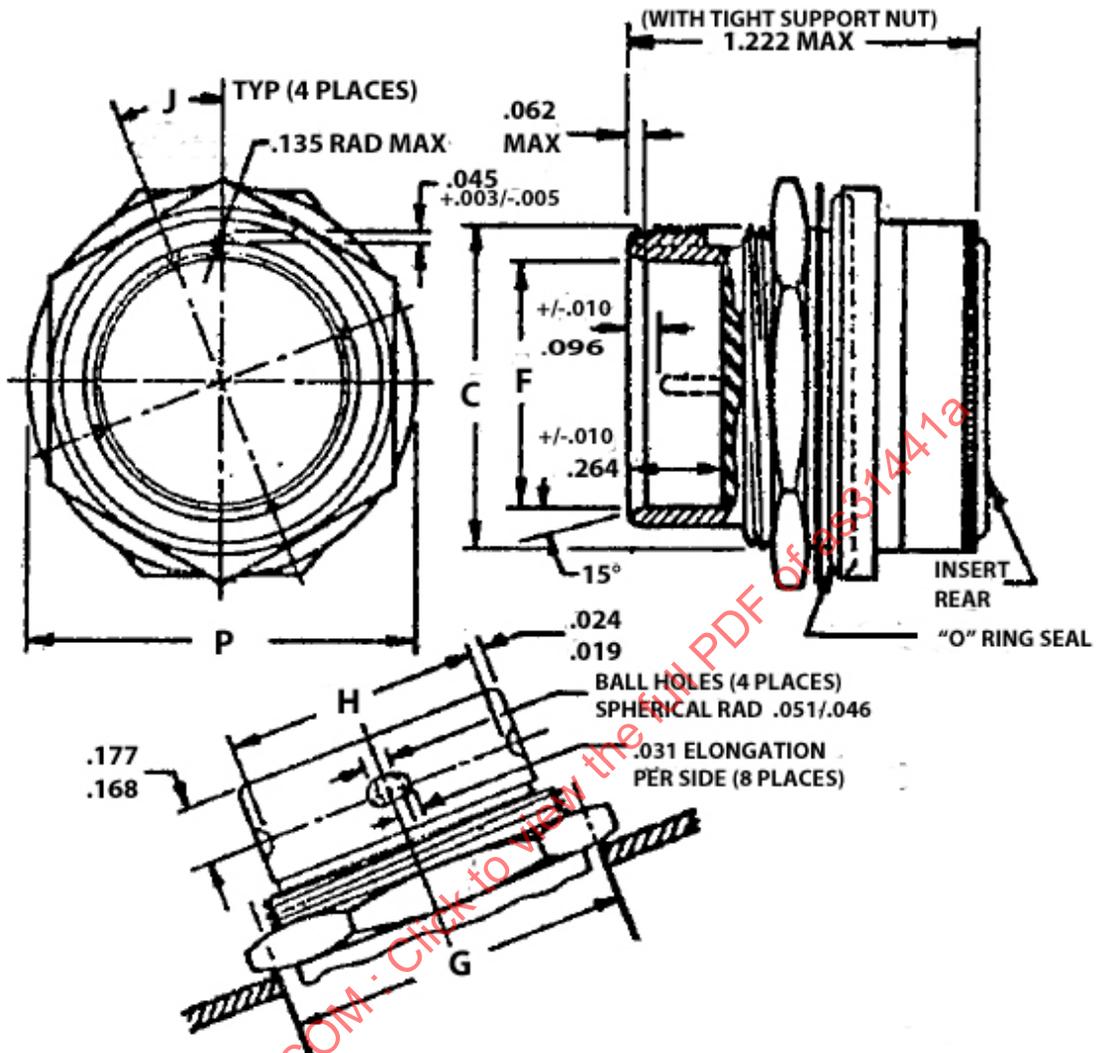
(R) CONNECTOR, RECEPTACLE, ELECTRIC, CRIMP TYPE, JAM NUT MOUNTING, PUSH-PULL, COUPLING, SERIES 2 (CLASS E AND J)

AS31441™
SHEET 1 OF 4

REV.
A

SAE Executive Standards Committee Rules provide that: " This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user." SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

ISSUED 2004-06 REVISED 2011-08 REAFFIRMED 2021-05



STYLE P (PIN INSERT)

FIGURE 2 - CONNECTOR CONFIGURATIONS AND DIMENSIONS (CLASS E-CONTINUED)

TABLE 1 - FIGURE 1 AND 2 DIMENSIONS

SHELL SIZE DASH NO.	C THREAD SIZE	D MAX DIA REAR	E $+0.006/-0.004$ SHELL OUTSIDE DIA	F $+0.003/-0.007$ SHELL INSIDE DIA	G $+0.020/-0.005$ MOUNTING HOLE DIA	H $+0.002/-0.005$ BALL HOLE SPACING	J BALL HOLE LOCATION
-3	9/16-24 UNEF-2A	.625	.435	.364	.571	.396	30 DEGREES
-7	11/16-24 UNEF-2A	.702	.570	.480	.696	.531	22.5 DEGREES
-12	13/16-20 UNEF-2A	.828	.704	.621	.818	.666	
-19	1-20 UNEF-2A	.953	.843	.760	1.010	.804	
-27	1 1/8-18 UNEF-2A	1.102	.998	.915	1.135	.959	
-37	1 1/4-18 UNEF-2A	1.266	1.120	1.037	1.260	1.081	



AEROSPACE STANDARD

(R) CONNECTOR, RECEPTACLE, ELECTRIC, CRIMP TYPE, JAM NUT MOUNTING, PUSH-PULL, COUPLING, SERIES 2 (CLASS E AND J)

AS31441™
SHEET 2 OF 4

REV.
A

TABLE 1 – FIGURE 1 AND 2 DIMENSIONS (CONTINUED)

SHELL SIZE DASH NO.	K POINT OF SPRING CONTACT	L INSERT SEAL I.D.	M FLATS FLANGE	N FLATS NUT	P DIA FLANGE 90° FROM FLATS	R MAX PANEL THICKNESS	FOR INSERT ARRANGEMENT SEE DRAWING
-3	.138 MAX MEASURE WITH SQUARE NOSE PIN HAVING SAME BASIC DIAMETER OF MATING CONTACT	.264	.750	.625	.750	.093	AS33698
-7		.380	.875	.812	.875		AS33699
-12		.520	1.062	.937	1.062		AS33700
-19		.660	1.156	1.062	1.187		AS33701
-27		.815	1.312	1.250	1.312		AS33702
-37		.937	1.420	1.375	1.500		AS33703

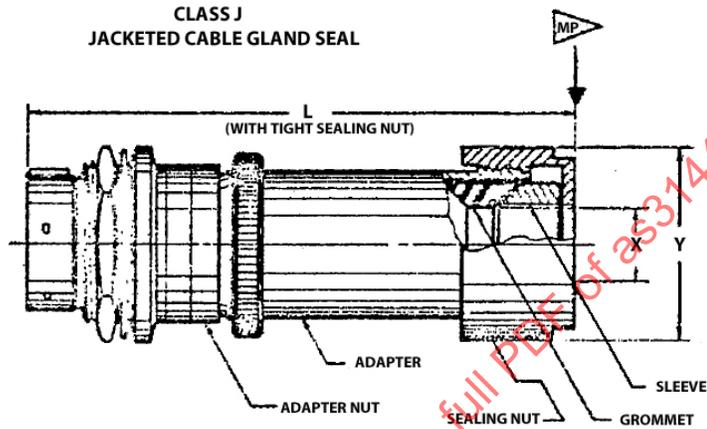


FIGURE 3 – JACKETED CABLE GLAND SEAL – WATERTIGHT TYPE (CLASS J, FOR USE WITH CLASS E CONNECTORS)

TABLE 2 - FIGURE 3 DIMENSIONS AND ACCESSORY PART NUMBERS

SHELL SIZE DASH NO.	L LENGTH MAX	X INSIDE DIA		Y MAX DIA NUT	ADAPTER MS3130J-*A	GROMMET MS3130J-*B	SLEEVE MS3130J-*C	SEALING NUT MS3130J-*D
		MIN	MAX					
-3	3.010	.178	.210	.645	MS3130J-3A	MS3130J-3B	MS3130J-3C	MS3130J-3D
-7	3.994	.381	.413	.926	MS3130J-7A	MS3130J-7B	MS3130J-7C	MS3130J-7D
-12	4.460	.412	.444	.988	MS3130J-12A	MS3130J-12B	MS3130J-12C	MS3130J-12D
-19	4.494	.522	.554	1.113	MS3130J-19A	MS3130J-19B	MS3130J-19C	MS3130J-19D
-27		.600	.632		MS3130J-27A	MS3130J-27B	MS3130J-27C	MS3130J-27D
-37	4.525	.662	.694	1.176	MS3130J-37A	MS3130J-37B	MS3130J-37C	MS3130J-37D

TABLE 2 - FIGURE 3 DIMENSIONS AND ACCESSORY PART NUMBERS (CONTINUED)

SHELL SIZE DASH NO.	"O" RING PART NUMBER	MAX CABLE WEIGHT IN POUNDS (ALLOWABLE FORCE IN DIRECTION INDICATED)
		MP
		MAX WEIGHT
-3	MS29513-15	2.0
-7	MS29513-17	2.7
-12	MS29513-19	4.0
-19	MS29513-22	5.5
-27	MS29513-24	8.0
-37	MS29513-26	12.0