

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.

REV.
B

AS31301™

FEDERAL SUPPLY CLASS
5935

RATIONALE

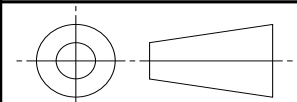
AS31301B IS BEING STABILIZED BECAUSE THE PROCESSES/PRODUCT IS CONSIDERED MATURE AND THE COMMITTEE DOES NOT ANTICIPATE FUTURE TECHNICAL CHANGES. STABILIZATION DOES NOT IMPLY THE PROCESS OR PRODUCT IS UNACCEPTABLE FOR APPLICATIONS FOR WHICH IT IS DESIGNED. ANY TECHNICAL CHANGES NOTED BY A SUPPLIER OR USER WHICH RESULTS IN A PRODUCT OR REQUIREMENT CHANGE WILL BE ADDRESSED BY A NEW REVISION. QUALIFIED SUPPLIERS ARE STILL MAINTAINED.

STABILIZED NOTICE

THIS DOCUMENT HAS BEEN DECLARED "STABILIZED" BY SAE AE-8C1 CONNECTORS COMMITTEE AND WILL NO LONGER BE SUBJECT TO PERIODIC REVIEWS FOR CURRENCY. USERS ARE RESPONSIBLE FOR VERIFYING REFERENCES AND CONTINUED SUITABILITY OF TECHNICAL REQUIREMENTS. NEWER TECHNOLOGY MAY EXIST.

For more information on this standard, visit
<https://www.sae.org/standards/content/AS31301B/>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8C1

PROCUREMENT SPECIFICATION: AS81703



AEROSPACE STANDARD

CONNECTOR, RECEPTACLE, ELECTRIC,
SOLDER TYPE, WALL MTG. FLANGE, PUSH-PULL
COUPLING, SERIES 1 (CLASS E, P, AND J)

AS31301™

REV.
B



Documents

Copyright © 2026 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, or used for text and data mining, AI training, or similar technologies, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 1-877-606-7323 (U.S. and Canada only)
Fax: 724-776-0790

Tel: 1-724-776-4970 (outside U.S. and Canada)
Email: CustomerService@sae.org

SAE WEB ADDRESS: <http://www.sae.org>

Technical drawing of a socket insert, showing front, side, and cross-sectional views with dimensions and labels.

Front View (Left):

- Overall width: A
- Overall height: B
- Inner diameter: $.120 \text{ DIA}$
- Outer diameter: $.135 \text{ MAX R}$
- Keyway depth: $.061$
- Keyway width: $.055$
- Label: MASTER KEY
- Flange relative to holes: EQUAL WITHIN $.015$ (8 PLACES)

Side View (Right):

- Overall width: 1.278 MAX
- Overall height: D
- Inner diameter: $.120 \text{ DIA}$
- Outer diameter: $.135 \text{ MAX R}$
- Keyway depth: $.061$
- Keyway width: $.055$
- Label: MASTER KEY
- Flange relative to holes: EQUAL WITHIN $.015$ (8 PLACES)

Cross-sectional View (Bottom):

- Overall width: 1.125 MAX
- Overall height: G
- Inner diameter: $.120 \text{ DIA}$
- Outer diameter: $.135 \text{ MAX R}$
- Keyway depth: $.061$
- Keyway width: $.055$
- Label: MASTER KEY
- Flange relative to holes: EQUAL WITHIN $.015$ (8 PLACES)

Dimensions and Tolerances:

- $\pm .15$
- 66
- $.060 \pm .010$
- $\pm .010$
- $.016$
- $.370$
- $+.031 / -.000$
- $.526$
- $+.031 / -.016$
- $+.031$
- $-.057$
- $-.010$

Labels:

- WITH TIGHT RETAINING NUT
- WITH TIGHT RETAINING NUT
- WITH TIGHT RETAINING NUT

Style S (Socket Insert)

	AEROSPACE STANDARD	AS31301™ SHEET 1 OF 6	REV. B
	CONNECTOR, RECEPTACLE, ELECTRIC, SOLDER TYPE, WALL MTG. FLANGE, PUSH-PULL COUPLING, SERIES 1 (CLASS E, P, AND J)		



 Document Sharing Hub

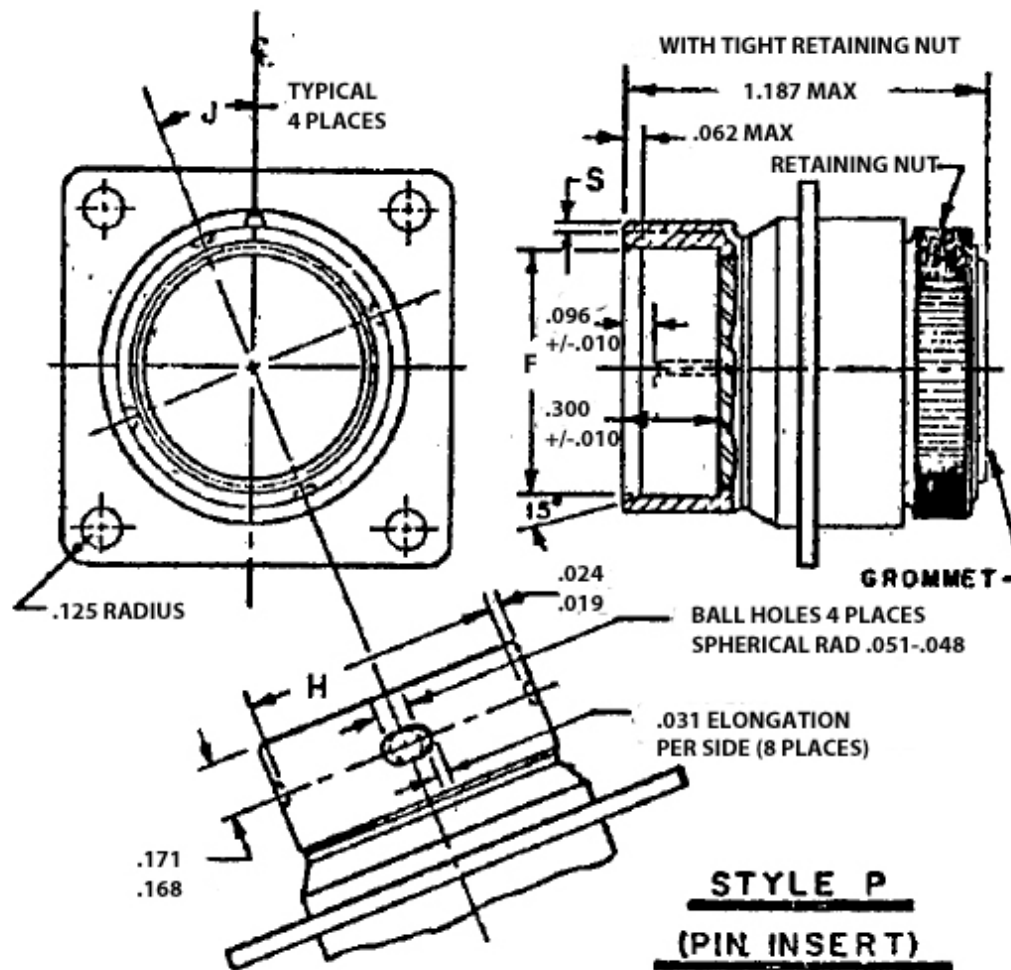


FIGURE 2 – CONNECTOR CONFIGURATIONS AND DIMENSIONS (CLASS E - CONTINUED)

TABLE 1 – FIGURE 1 AND 2 DIMENSIONS

SHELL SIZE DASH NO.	A MAX. LENGTH SIDE	B BSC MOUNTING CENTERS	C MAX. DIA. FRONT	D MAX. DIA. REAR	E +.006/- .004 SHELL OUTSIDE DIA.	F +.003/- .007 SHELL INSIDE DIA.	G MIN. DIA. MOUNTING HOLE
-3	.896	.625	.578	.625	.435	.364	.632
-7	1.021	.719	.691	.691	.570	.480	.698
-12	1.114	.812	.828	.828	.704	.621	.835
-19	1.208	.906	.953	.953	.843	.760	.960
-27	1.302	.968	1.136	1.078	.998	.915	1.143
-37	1.458	1.187	1.266	1.266	1.120	1.037	1.273



AEROSPACE STANDARD
CONNECTOR, RECEPTACLE, ELECTRIC,
SOLDER TYPE, WALL MTG. FLANGE, PUSH-PULL
COUPLING, SERIES 1 (CLASS E, P, AND J)

AS31301™
SHEET 2 OF 6

REV.
B



Documents

Document Sharing Hub