

AS34091

NOTICE

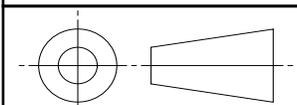
THIS DOCUMENT HAS BEEN TAKEN DIRECTLY FROM U.S. MILITARY SPECIFICATION MS3409B(NAVY), NOTICE 1 AND CONTAINS ONLY MINOR EDITORIAL AND FORMAT CHANGES REQUIRED TO BRING IT INTO CONFORMANCE WITH THE PUBLISHING REQUIREMENTS OF SAE TECHNICAL STANDARDS. THE INITIAL RELEASE OF THIS DOCUMENT IS INTENDED TO REPLACE MS3409B(NAVY), NOTICE 1. ANY PART NUMBERS ESTABLISHED BY THE ORIGINAL SPECIFICATION REMAIN UNCHANGED.

THE ORIGINAL MILITARY SPECIFICATION WAS ADOPTED AS AN SAE STANDARD UNDER THE PROVISIONS OF THE SAE TECHNICAL STANDARDS BOARD (TSB) RULES AND REGULATIONS (TSB 001) PERTAINING TO ACCELERATED ADOPTION OF GOVERNMENT SPECIFICATIONS AND STANDARDS. TSB RULES PROVIDE FOR (A) THE PUBLICATION OF PORTIONS OF UNREVISED GOVERNMENT SPECIFICATIONS AND STANDARDS WITHOUT CONSENSUS VOTING AT THE SAE COMMITTEE LEVEL, AND (B) THE USE OF THE EXISTING GOVERNMENT SPECIFICATION OR STANDARD FORMAT.

UNDER DEPARTMENT OF DEFENSE POLICIES AND PROCEDURES, ANY QUALIFICATION REQUIREMENTS AND ASSOCIATED QUALIFIED PRODUCTS LISTS ARE MANDATORY FOR DOD CONTRACTS. ANY REQUIREMENT RELATING TO QUALIFIED PRODUCTS LISTS (QPL'S) HAS NOT BEEN ADOPTED BY SAE AND IS NOT PART OF THIS TECHNICAL REPORT.

SAENORM.COM : Click to view the full PDF of as34091

THIRD ANGLE PROJECTION



ISSUED 2004-06

CUSTODIAN: SAE AE-8/AE-8C1

PROCUREMENT SPECIFICATION: MIL-C-5015



**AEROSPACE STANDARD**

CONNECTORS, PLUG, ELECTRIC,  
45 DEGREES ASSEMBLY, CRIMP CONTACT, AN TYPE

**AS34091**  
SHEET 1 OF 7

Copyright 2004 SAE International

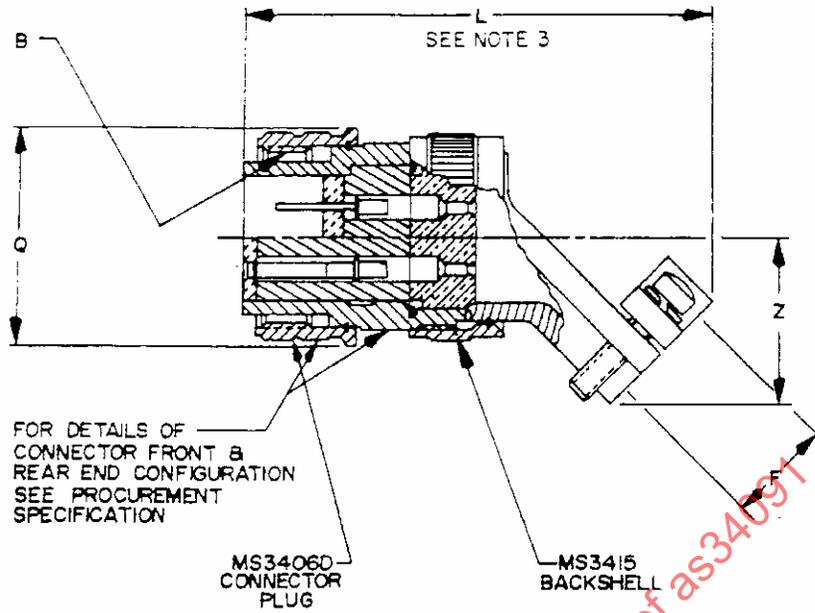
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 877-606-7323 (inside USA and Canada)  
Fax: 724-776-0790

Tel: 724-776-4970 (outside USA)  
Email: custsvc@sae.org

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

SAE Technical Standards Board 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 reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.



CLASS D ENVIRONMENTAL RESISTANT

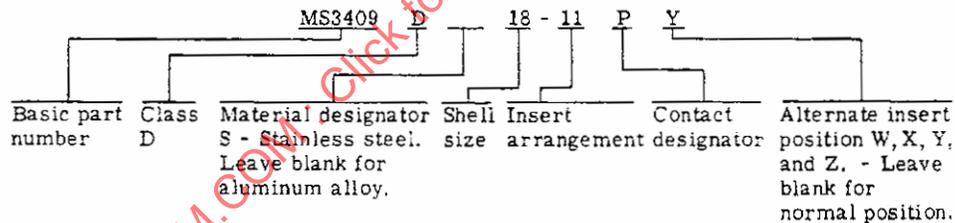
NOTES:

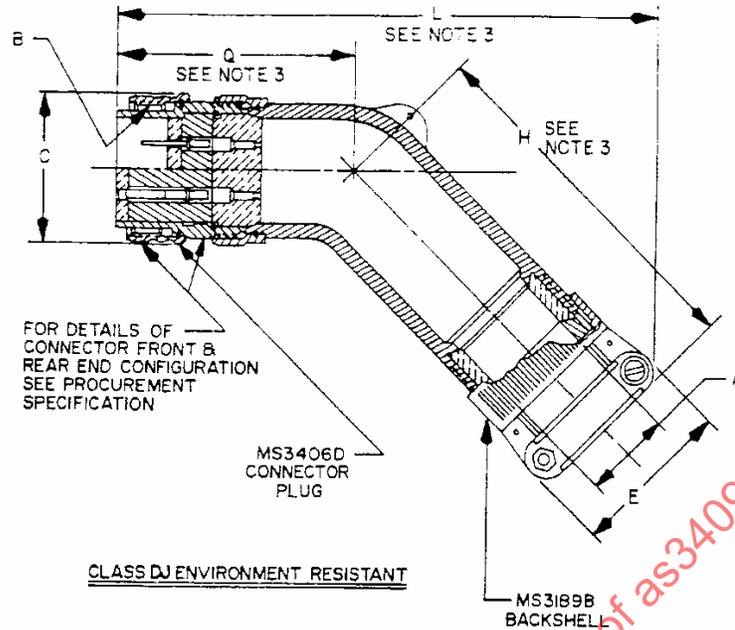
1. DIMENSIONS ARE IN INCHES.
2. UNLESS OTHERWISE SPECIFIED, TOLERANCE IS  $\pm 0.016$ .
3. FOR SIZE 8, 4 AND 0 CONTACTS, ADD .375 TO OVERALL LENGTH.
4. FOR INSERT ARRANGEMENTS SEE MIL-STD-1651.
5. THIS ASSEMBLY IS AVAILABLE ONLY WITH CLASS D OR DS CONNECTOR PLUG FOR JACKETED CABLE.
6. UNLESS OTHERWISE SHOWN, CORRESPONDING FEATURES OF PIN AND SOCKET CONTACT CONNECTORS ARE IDENTICAL.
7. MIL-C-5015 CRIMP CONTACT, FRONT AND REAR RELEASE CONNECTORS AND SOLDER CONTACT CONNECTORS ARE INTERMATEABLE.
8. DIMENSIONS AND TOLERANCES IN ACCORDANCE WITH ANSI Y14.5-1973.
9. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.
10. FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.

AS34091

ASSEMBLY NO	CONNECTOR PLUG NO.	ADAPTER ASSEMBLY NO.	B THREAD CLASS 2B	F CABLE ENTRY		L MAX. CLOSED	Q DIA. MAX.	Z MAX.
				MAX.	MIN.			
MS3409D8S-XX	MS3406D-8S-XX	MS3415 -8C	.500-28UNEF	.204	.125	3.000	.844	.772
▲ 10S-XX	▲ -10S-XX	▲ -10C	.625-24UNEF	.286	.187	3.062	.969	.803
10SL-XX	-10SL-XX	-10C	.625-24UNEF	.286	.187	3.062	.969	.803
12S-XX	-12S-XX	-12C	.750-20UNEF	.416	.291	3.125	1.062	.866
12-XX	-12-XX	-12C	.750-20UNEF	.416	.291	3.125	1.062	.866
14S-XX	-14S-XX	-14C	.875-20UNEF	.476	.351	3.188	1.156	.928
14-XX	-14-XX	-14C	.875-20UNEF	.476	.351	3.188	1.156	.928
16S-XX	-16S-XX	-16C	1.000-20UNEF	.625	.501	3.250	1.250	.991
16-XX	-16-XX	-16C	1.000-20UNEF	.625	.501	3.250	1.250	.991
18-XX	-18-XX	-18C	1.125-18UNEF	.706	.518	3.375	1.344	1.110
20-XX	-20-XX	-20C	1.250-18UNEF	.831	.581	3.438	1.469	1.172
22-XX	-22-XX	-22C	1.375-18UNEF	.956	.644	3.500	1.594	1.235
24-XX	-24-XX	-24C	1.500-18UNEF	1.081	.706	3.500	1.719	1.297
28-XX	-28-XX	-28C	1.750-18UNS	1.187	.750	3.625	1.969	1.543
32-XX	-32-XX	-32C	2.000-18UNS	1.250	.875	3.750	2.219	1.668
36-XX	-36-XX	-36C	2.250-16UN	1.375	.938	3.812	2.469	1.793
40-XX	-40-XX	-40C	2.500-16UN	1.500	.938	3.812	2.719	1.918
▼ 44-XX	▼ -44-XX	▼ -44C	2.750-16UN	1.750	1.188	4.062	2.969	2.132
MS3409D48-XX	MS3406D-48-XX	MS3415 -48C	3.000-16UN	1.875	1.312	4.125	3.219	2.257

EXAMPLE OF PART NO.: MS3409D 18-11PY





## REQUIREMENTS:

1. CONNECTOR AND BACKSHELL SHALL BE OF THE SAME MATERIAL AND FINISH IN ACCORDANCE WITH MIL-C-5015.
2. CONNECTOR, BACKSHELL AND ANCILLARY HARDWARE SHALL CONFORM TO THE DISSIMILAR METAL COMPATIBILITY REQUIREMENTS OF MIL-STD-454, REQUIREMENT 16.

## NOTES:

1. DIMENSIONS ARE IN INCHES.
2. UNLESS OTHERWISE SPECIFIED, TOLERANCE IS  $\pm .016$ .
3. FOR SIZE 8, 4 AND 0 CONTACTS, ADD .375 TO OVERALL LENGTH.
4. UNIT PACKAGE SHALL BE MARKED WITH CLASS DJ PART NUMBER ONLY. CONNECTOR SHALL BE MARKED WITH CLASS D PART NUMBER.
5. THIS ASSEMBLY IS AVAILABLE ONLY WITH CLASS D OR DS CONNECTOR PLUG FOR JACKETED CABLE.
6. UNLESS OTHERWISE SHOWN, CORRESPONDING FEATURES OF PIN AND SOCKET CONTACT CONNECTORS ARE IDENTICAL.
7. MIL-C-5015 CRIMP CONTACT, FRONT AND REAR RELEASE CONNECTORS AND SOLDER CONTACT CONNECTORS ARE INTERMATEABLE.
8. DIMENSIONS AND TOLERANCES IN ACCORDANCE WITH ANSI Y14.5-1973.
9. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.
10. FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.

AS34091

ASSEMBLY NO.	CONNECTOR PLUS NO.	BACKSHELL ASSEMBLY NO.	CABLE MAX.	A ENTRY MIN.	B THREAD CLASS 2	F DIA. MAX.	E MAX.	H MAX.	L MAX.	Q MAX.
MS34091-10AXX	MS34091-10S-XX	MS34091-04A	.312	.125	.625-24UNEF	.969	.957	3.062	4.875	2.438
10BXX	-10S-XX	-49A	.437	.250			1.145	3.062	5.812	3.250
10DXX	-10S-XX	-05A	.375	.250			1.145	2.438	4.562	2.438
11AXX	-10SL-XX	-04A	.312	.125			.957	3.062	4.875	2.438
11BXX	-10SL-XX	-49A	.437	.250			1.145	3.062	5.812	3.250
11DXX	-10SL-XX	-05A	.375	.250	.625-24UNEF	.969	1.145	2.438	4.562	2.438
13AXX	-12S-XX	-06A	.312	.125	.750-20UNEF	1.062	.957	3.062	5.000	2.500
13BXX	-12S-XX	-71A	.625	.350			1.332	3.312	6.188	3.375
13DXX	-12S-XX	-08A	.500	.350			1.332	3.062	5.125	2.500
13EXX	-12S-XX	-07A	.437	.250			1.145	3.062	5.062	2.500
12AXX	-12-XX	-06A	.312	.125			.957	3.062	5.000	2.500
12BXX	-12-XX	-71A	.625	.350			1.332	2.938	6.188	3.375
12DXX	-12-XX	-08A	.500	.350			1.332	3.062	5.125	2.500
12EXX	-12-XX	-07A	.437	.250	.750-20UNEF	1.062	1.145	3.062	5.062	2.500
15AXX	-14S-XX	-09A	.437	.250	.875-20UNEF	1.156	1.145	3.188	5.125	2.562
15BXX	-14S-XX	-50A	.750	.500			1.551	3.500	6.625	3.625
15DXX	-14S-XX	-10A	.575	.350			1.332	2.812	5.000	2.562
15EXX	-14S-XX	-74A	.312	.125			.957	3.188	5.125	2.562
14AXX	-14-XX	-09A	.437	.250			1.145	3.188	5.138	2.562
14BXX	-14-XX	-50A	.750	.500			1.551	3.500	6.625	3.625
14DXX	-14-XX	-10A	.575	.350			1.332	2.812	5.000	2.562
14EXX	-14-XX	-74A	.312	.125	.875-20UNEF	1.156	.957	3.188	5.125	2.562
17AXX	-16S-XX	-12A	.700	.500	1.000-20UNEF	1.250	1.551	2.938	5.312	2.625
17BXX	-16S-XX	-51A	.937	.625			1.770	3.750	6.938	3.688
17DXX	-16S-XX	-11A	.437	.250			1.145	3.312	5.375	2.625
17EXX	-16S-XX	-40A	.625	.350			1.332	3.312	5.438	2.625
16AXX	-16-XX	-12A	.700	.500			1.551	2.938	5.312	2.625
16BXX	-16-XX	-51A	.937	.625			1.770	3.750	6.938	3.688
16DXX	-16-XX	-11A	.437	.250			1.145	3.312	5.375	2.625
16EXX	-16-XX	-40A	.625	.350	1.000-20UNEF	1.250	1.332	3.312	5.438	2.625
18AXX	-18-XX	-13A	.625	.350	1.125-13UNEF	1.344	1.332	3.500	5.750	2.912
18BXX	-18-XX	-52A	.750	.500			1.551	3.500	5.875	2.812
18EXX	-18-XX	-41A	.312	.125			.957	3.500	5.625	2.812
18FXX	-18-XX	-42A	.437	.250	1.125-13UNEF	1.344	1.145	3.500	5.688	2.812
20AXX	-20-XX	-15A	.625	.350	1.250-18UNEF	1.469	1.332	3.500	5.750	2.812
20BXX	-20-XX	-54A	.750	.500			1.551	3.500	5.875	2.812
20EXX	-20-XX	-55A	1.250	.375			2.113	4.000	7.375	3.812
20FXX	-20-XX	-43A	.437	.250			1.145	3.500	5.638	2.812
20GXX	-20-XX	-16A	.904	.625	1.250-13UNEF	1.469	1.770	3.250	5.750	2.912
22AXX	-22-XX	-56A	.625	.350	1.375-13UNEF	1.594	1.332	3.625	5.938	2.938
22BXX	-22-XX	-17A	.750	.500			1.551	3.633	6.062	2.938
22DXX	-22-XX	-57A	.937	.625			1.770	3.750	6.133	2.938
22EXX	-22-XX	-58A	1.250	.875			2.113	4.000	7.375	3.812
MS34091-22EXX	MS34091-22-XX	MS34091-44A	.312	.125	.875-13UNEF	1.594	.957	3.625	5.812	2.938