

NOTICE

AS31061

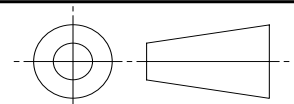
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THIRD ANGLE PROJECTION



ISSUED 2004-06

CUSTODIAN: SAE AE-8/AE-8C1

PROCUREMENT SPECIFICATION: MIL-C-5015

SAE Aerospace
An SAE International Group**AEROSPACE STANDARD**CONNECTOR, PLUG, ELECTRIC,
STRAIGHT, SOLDER CONTACTS,
AN TYPE**AS31061**
SHEET 1 OF 11

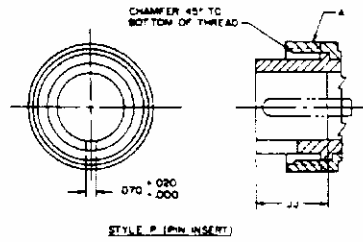
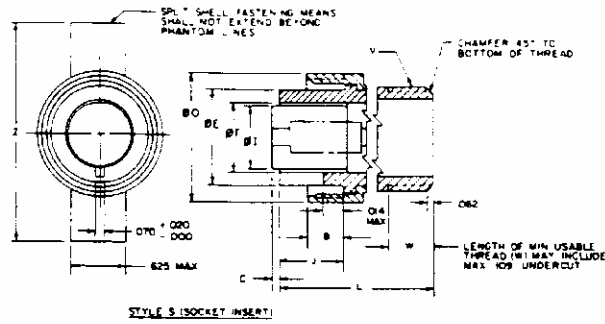
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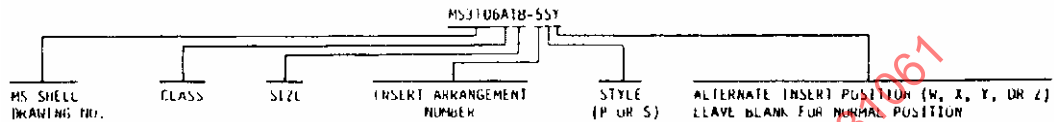
CLASS A-SOLID SHELL

SIZE	A COUPLING THREAD	B +.000/--.062 EXTENSION COUPLING RING	E +.000 -.015 OUTSIDE	F MIN INSIDE	Ø1 MAX INSERT	J LENGTH ENGAGE- MENT +.005	(K) J2 +.031/--.000 INSERT LOCATION	Ø MAX OVERALL LENGTH	Ø MAX OVERALL OUTSIDE	V THREAD	W MIN USABLE THREAD	Z MAX CLASS B ONLY	FOR INSERT ARRANGEMENT SEE
85	1/2-28		.365	.252	.250			1.469	.844	1/2-28		.844	MIL-STD-1651
105	5/8-24	.375	.440	.323	.320	.531	.562	1.531	.969			.969	
105L			.446		.440			1.688	1.062	5/8-24		1.062	
125	3/4-20	.625	.555	.450	.445	.719	.750	2.062					
145		.375				.531	.562	1.688	1.156	3/4-20	.375	1.156	
14	7/8-20	.625	.675	.526	.525	.719	.750	2.062					
165		.375				.531	.562	1.688	1.250	7/8-20		1.250	
16	1-20		.805	.651	.650								
18	1-1/8-18		.930	.776	.770			2.062	1.344	1-20		1.641	
20	1-1/4-18		1.050	.932	.925				1.469	1-3/16-18		1.812	
22	1-3/8-18		1.175	1.026	1.020			2.186	1.594			1.938	
24	1-1/2-18	.625	1.300	1.151	1.145	.719	.750		1.719	1-7/16-18		2.062	
28	1-3/4-18		1.520	1.370	1.365			2.312	1.969			2.312	
32	2-18		1.770	1.620	1.615				2.219	1-3/4-18	.438	2.594	
36	2-1/4-16		1.980	1.838	1.830			2.438	2.469	2-18	.500	2.844	
40	2-1/2-16		2.230	2.057	2.047				2.719	2-1/4-16		3.000	

NOTES:

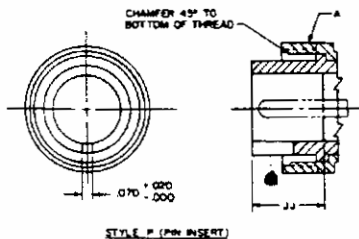
- (a) CLASS A IS CANCELLED AFTER 1 JAN 1991. FOR NEW DESIGN USE MS3456W WITH THE APPROPRIATE M85049/31 BACKSHELL. FOR SHIPBOARD JACKETED CABLES USE MS3406.
- (b) WHERE RESILIENT INSERTS ARE USED, JJ MAY BE .109 LESS THAN THAT INDICATED.
- (c) SOCKET INSERT OF HARD MATERIAL SHALL EXTEND .016 MAXIMUM BEYOND OR .032 MAXIMUM BELOW SHELL. SOCKET INSERT OF RESILIENT MATERIAL SHALL EXTEND .047 +.000 -.047 BEYOND SHELL AS SHOWN.
- (d) CONNECTORS MS3106A REPLACE AND ARE INTERCHANGEABLE WITH CORRESPONDING AN3106A (OR B) CONNECTORS.

EXAMPLE OF PART NUMBER:



DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS $\pm .016$.
 THIS SPECIFICATION SHEET TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
 REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.

CERTAIN PROVISIONS OF THIS SPECIFICATION SHEET ARE THE SUBJECT OF INTERNATIONAL STANDARDIZATION AGREEMENTS ASCC 12/14 AND NEPR 28. WHEN AMENDMENT, REVISION, OR CANCELLATION OF THIS SPECIFICATION SHEET IS PROPOSED WHICH WILL MODIFY THE INTERNATIONAL AGREEMENT CONCERNED, THE PREPARING ACTIVITY WILL TAKE APPROPRIATE ACTION THROUGH INTERNATIONAL STANDARDIZATION CHANNELS INCLUDING DEPARTMENTAL STANDARDIZATION OFFICES TO CHANGE THE AGREEMENT OR MAKE OTHER APPROPRIATE ACCOMMODATIONS.



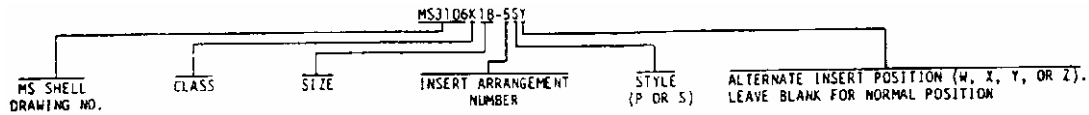
CLASS K- FIREWALL

SIZE	A COUPLING THREAD	B +.000/- .062 EXTENSION COUPLING RING	C +.000 -.015 OUTSIDE	D MIN INSIDE	E MAX INSERT	J LENGTH ENGAGE- MENT	(a) JJ +.021/- .000 INSERT LOCATION	L MAX OVERALL LENGTH	Q MAX OVERALL OUTSIDE	V THREAD	W MIN	Z MAX	FOR INSERT ARRANGEMENT SEE		
85	1/2-28	.375	.365	.252	.250	.531	.562	2.188	.844	1/2-28	.375	.844	MIL-STD-1651		
105	5/8-24		.440	.323	.320				.969	5/8-24		.969			
105L			.446		.440							1.062			
125	3/4-20	.625	.555	.450	.448	.719	.750	2.875	1.062	3/4-20					
12															
145	7/8-20	.375	.675	.526	.525	.531	.562	2.188		7/8-20	.375	1.156			
14		.625				.719	.750	2.875	1.172						
185	1 -20	.375				.531	.562	2.188		7/8-20	.375	1.250			
16			.806	.651	.650				1.266						
18	1-1/8-18		.930	.776	.770	.719	.750	2.875	1.359	1 -20	.375	1.641			
20	1-1/4-18		1.050	.932	.925				1.484	1-3/16-18		1.812			
22	1-3/8-18		1.175	1.026	1.020			3.125	1.609			1.938			
24	1-1/2-18	.625	1.300	1.151	1.145				1.734	1-7/16-18		2.062			
28	1-3/4-18		1.520	1.370	1.365				1.984			2.312			
32	2 -18		1.770	1.620	1.615				2.234	1-3/4-18	.438	2.594			
36	2-1/4-16		1.960	1.838	1.830				2.484	2 -18	.500	2.844			

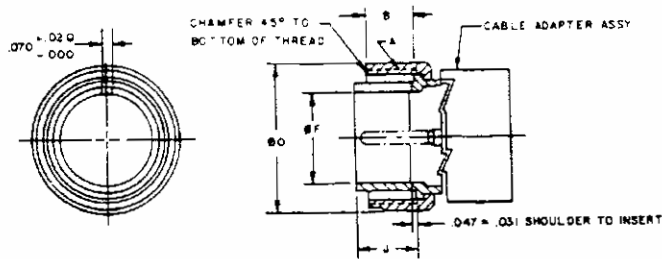
NOTES:

- (a) CLASS K IS INACTIVE FOR NEW DESIGN AFTER 1 JAN 1991. FOR NEW DESIGN USE MS3456K WITH APPROPRIATE M85049/31 BACKSHELL. FOR SHIPBOARD JACKETED CABLES USE MS3406.
- (b) CONNECTORS MS3106K REPLACE AND ARE INTERCHANGEABLE WITH CORRESPONDING AN3106K CONNECTORS.

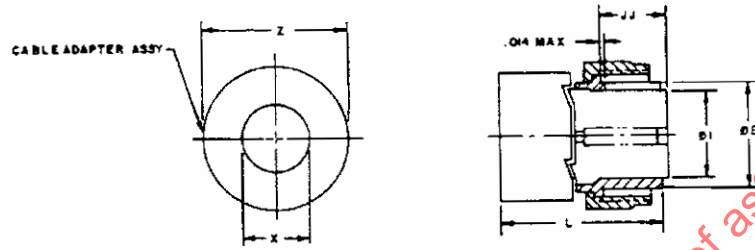
EXAMPLE OF PART NUMBER:



DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS ± 0.016 .
THIS SPECIFICATION SHEET TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.



STYLE P (PIN INSERT)



STYLE S (SOCKET INSERT)

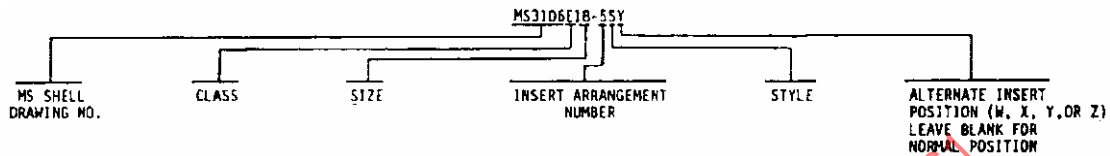
CLASS E-ENVIRONMENT RESISTANT

SIZE	A COUPLING THREAD	B +.000 -.002 EXTENSION COUPLING RING	E +.000 -.015 OUTSIDE	F MIN INSIDE	G MAX INSERT	H +.005 LENGTH ENGAGE- MENT	J +.042 -.000 INSERT LOCATION	K MAX OVER- ALL LENGTH	L COUPLING NUT MAX OUTSIDE	M MIN CABLE CLEARANCE	N MAX ACROSS ADAPTER ASSY	FOR INSERT ARRANGEMENT SEE
8S	1/2-28		.365	.252	.250				.844	.172	1.046	
10S	5/8-24	.375	.440	.323	.320	.531	.531	2.250	.969		1.125	
10SL			.446		.440					.281		
12S	3/4-20	.625	.555	.450	.448	.719	.719	2.625	1.062			
14S	7/8-20	.375	.675	.526	.525	.531	.531	2.250	1.156	.406	1.343	
14		.625				.719	.719	2.625				
16S	1-20	.375	.805	.651	.650	.531	.531	2.250	1.250	.500	1.484	MIL-STD-1651
16								2.625				
18	1-1/8-18		.930	.776	.770			2.688	1.344	.531	1.609	
20	1-1/4-18		1.050	.932	.925			2.750	1.469	.656	1.890	
22	1-3/8-18		1.175	1.026	1.020				1.594	.750		
24	1-1/2-18	.625	1.300	1.151	1.145	.719	.719	2.969	1.719	.781	2.170	
26	1-3/4-18		1.520	1.370	1.365				1.969	.922		
32	2-18		1.770	1.620	1.615			3.031	2.219	1.156	2.656	
36	2-1/4-16		1.980	1.838	1.830			3.281	2.469	1.250	2.922	
40	2-1/2-16		2.230	2.057	2.045			3.500	2.719	1.562	3.520	

NOTES:

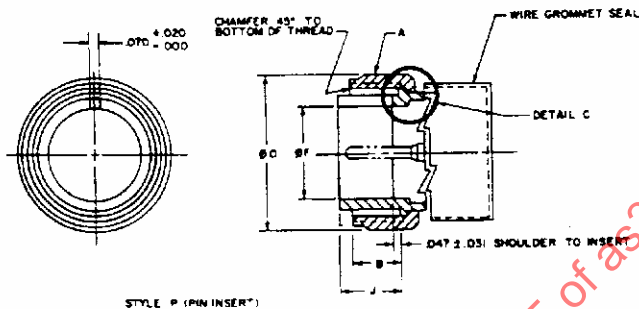
- (a) CLASS E IS CANCELLED AFTER 1 JAN 1991. FOR REPLACEMENT PURPOSES USE MS3106F FOR CONNECTOR WITH CLAMP AND 3106R FOR CONNECTOR WITH GROMMET SEAL. MANUFACTURERS MAY CONTINUE TO SUPPLY MS3106E CONNECTORS UNTIL 1 JAN 1992 OR EXHAUST THEIR INVENTORIES, WHICHEVER COMES FIRST. FOR NEW DESIGN USE MS3456W WITH APPROPRIATE M85049/31 BACKSHELL. FOR SHIPBOARD JACKETED CABLES USE MS3406.
- (b) CONNECTORS MS3106E REPLACE AND ARE INTERCHANGEABLE WITH CORRESPONDING AN3106E CONNECTORS.

EXAMPLE OF PART NUMBER:



DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS $\pm .016$.
THIS SPECIFICATION SHEET TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.

AS31061	
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SIZE	A COUPLING THREAD	B +.000 -.062 EXTENSION COUPLING RING	E +.000 -.015 O OUTSIDE	F MIN O INSIDE	#1 MAX INSERT	J +.005 LENGTH ENGAGE- MENT	JJ +.047 -.000 INSERT LOCATION	L (4) MAX OVERALL LENGTH	O COUPLING HWT. MAX MAX OUTSIDE	I MIN CABLE CLEARANCE	OT +.005 -.010	Z MAX ACROSS WIRE BROWNET SEAL	FOR INSERT ARRANGEMENT SEE DRAWING	PACKING MS28900 DASH NO.	
85	1/2-28	.375	.365	.252	.250	.531	.531	1.838	.864	.172	.355	1.046	MIL-STD-1651	-8	
105	5/8-24		.440	.323	.320				.969		.440			-10	
105L			.446	—	.440				1.062		.446				
125	3/4-20	.625	.555	.450	.448	.719	.719	2.181		.281	.555	1.125		-12	
12															
145	7/8-20	.375	.675	.526	.525	.531	.531	1.838	1.156	.406	.675	1.345		-14	
14		.625				.719	.719	2.181							
165		.375				.531	.531	1.838							
16	1 -20	.625	.805	.651	.650	.719	.719	2.181	1.250	.500	.805	1.484		-16	
18	1-1/8-18		.930	.776	.770			2.281	1.344	.531	.930	1.609		-18	
20	1-1/4-18		1.050	.932	.925				1.469	.656	1.050	1.890		-20	
22	1-3/8-18		1.175	1.026	1.020				1.594	.750	1.175			-22	
24	1-1/2-18		1.300	1.151	1.145				1.719	.781	1.300			-24	
28	1-3/4-18		1.520	1.370	1.365				1.969	.922	1.520			-28	
32	2 -16		1.770	1.620	1.615			2.322	2.219	1.156	1.770	2.656		-32	
36	2-1/4-16		1.980	1.838	1.830			2.430	2.469	1.250	1.980	2.922		-36	
40	2-1/2-16		2.230	2.057	2.045				2.719	1.562	2.230	3.328		-40	