

NOTICE

AS31011

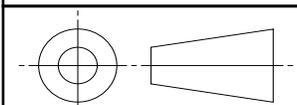
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THIRD ANGLE PROJECTION



ISSUED 2004-06

CUSTODIAN: SAE AE-8/AE-8C1

PROCUREMENT SPECIFICATION: MIL-C-5015



AEROSPACE STANDARD

CONNECTOR, PLUG, ELECTRIC,
CABLE CONNECTING, SOLDER CONTACTS,
AN TYPE

AS31011
SHEET 1 OF 9

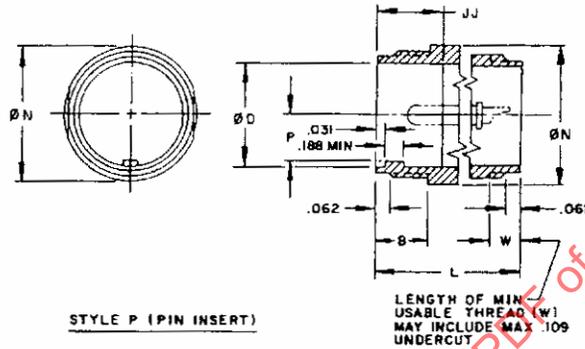
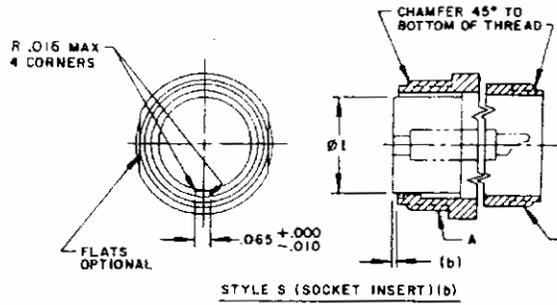
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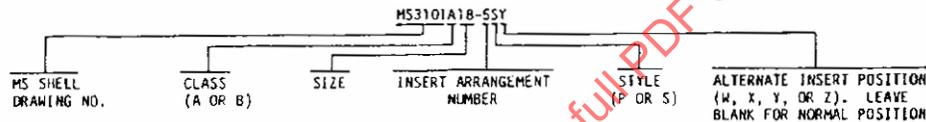
CLASS A - SOLID SHELL
CLASS B - SPLIT SHELL

SIZE	A COUPLING THREAD	B MIN USABLE THREAD	D +.015 -.000 Ø INSIDE	Ø I MAX INSERT	(c) JJ +.031 -.000 INSERT LOCATION	L MAX OVERALL LENGTH	(f) N MAX OVERALL Ø OUTSIDE	P +.015 -.000 KEY HEIGHT	V THREAD	W MIN USABLE THREAD	FOR INSERT ARRANGEMENT, SEE DRAWING
85	1/2-28	.375	.370	.250	.562	1.469	.844	.130	1/2-28	.375	MIL-STD-1651
105	5/8-24		.448	.320		1.531	.969	.165	5/8-24		
105L											
125	3/4-20	.625	.557	.448	1.698	1.062	.224	3/4-20			
145	7/8-20	.375	.612	.525	1.888	1.156	.263	7/8-20			
14	7/8-20	.625			2.062						
165	1 -20	.375	.807	.650	1.698	1.250	.325	7/8-20			
16	1 -20				2.062						
18	1-1/8-18		.912	.770		1.344	.385	1 -20			
20	1-1/4-18		1.058	.925		1.469	.463	1-3/16-18			
22	1-3/8-18	.625	1.182	1.020	.750	1.594	.510	1-7/16-18			
24	1-1/2-18		1.307	1.145		1.719	.573	1-7/16-18			
26	1-3/4-18		1.526	1.365		1.969	.683				
32	2 -18		1.776	1.615		2.219	.808	1-3/4-18	.438		
36	2-1/4-16		1.995	1.830		2.469	.915	2 -18	.500		
40	2-1/2-16		2.245	2.045		2.719	1.023	2-1/4-16			
44	2-3/4-16		2.495	2.300		2.969	1.150	2-1/2-16	.562		
48	3 -16		2.745	2.550		3.219	1.275	3 -16	.625		

NOTES:

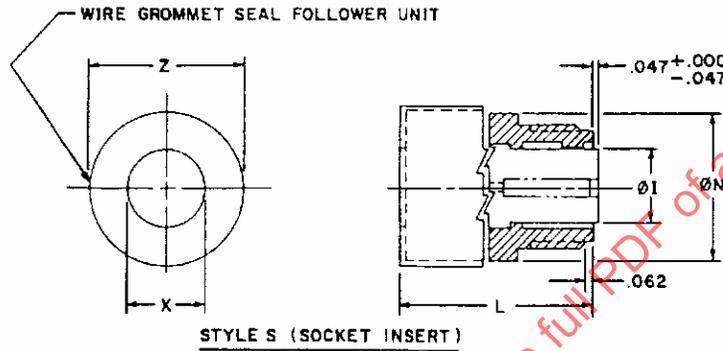
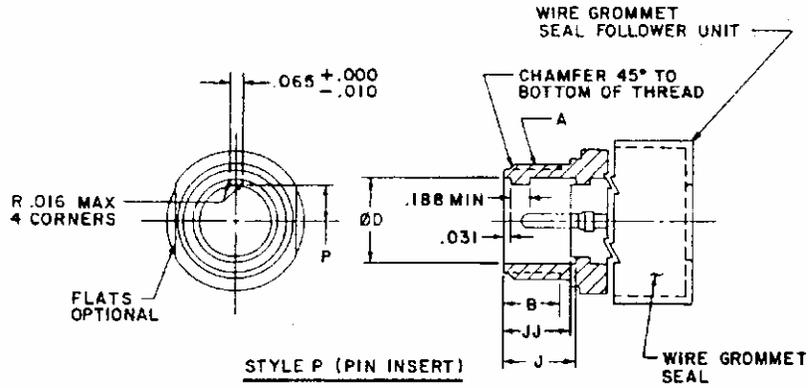
- (a) SIZES 85 THRU 40 OF CLASSES A AND B ARE CANCELLED AFTER 1 JAN 1991. FOR REPLACEMENT PURPOSES USE MS3101F OR MS3101R. MANUFACTURERS MAY CONTINUE TO SUPPLY THESE SIZES OF CLASSES A AND B UNTIL 1 JAN 1992 OR EXHAUST THEIR INVENTORIES, WHICHEVER COMES FIRST. FOR NEW DESIGN USE MS3451W WITH THE APPROPRIATE M85049/31 BACKSHELL. FOR SHIPBOARD JACKETED CABLES USE MS3401.
- (b) SIZES 44 AND 48 OF CLASSES A AND B ARE INACTIVE FOR NEW DESIGN.
- (c) WHERE RESILIENT INSERTS ARE USED, JJ MAY BE .109 LESS THAN THAT INDICATED.
- (d) 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.
- (e) DIMENSION W SHALL BE NOT LESS THAN THREAD DIAMETER Y.
- (f) CONNECTORS MS3101A (OR B) REPLACE AND ARE INTERCHANGEABLE WITH CORRESPONDING AN3101A (OR B) 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.

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.



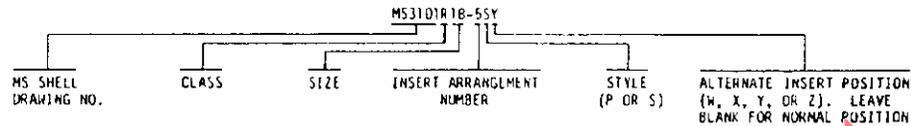
CLASS R - ENVIRONMENT RESISTANT

SIZE	A COMPLING THREAD	B MIN USABLE THREAD	D +.016 -.000 Ø INSIDE	Ø1 MAX INSERT	J +.031 -.000 Ø1 SHELL SHELL	JJ +.031 INSERT LOCATION	(A) L Ø1 OVERALL LENGTH	H MAX Ø OUTSIDE	P +.015 -.000 Ø1 HEIGHT	Z CABLE CLEARANCE R/W	Z MAX ACROSS RUT	FOR INSERT ARRANGEMENT SEE
8S	1/2-28		.370	.250				.844	.130			MIL-STD-1651
16S	5/8-24	.375	.448	.320	.562	.484	1.838	.969	.165	.172	1.046	
10SL												
12S	3/4-20		.557	.448				1.062	.224	.281	1.125	
12		.625			.750	.672	2.181					
14S	7/8-20	.375	.682	.525	.562	.484	1.838	1.156	.263	.406	1.342	
14		.625			.750	.672	2.181					
16S		.375			.562	.484	1.838					
16	1 -20		.803	.650			2.181	1.281	.325	.500		
18	1-1/8-18		.932	.770				1.344	.385	.531	1.409	
20	1-1/8-18		1.058	.925				1.500	.463	.658		
22	1-3/8-18		1.182	1.070			2.281	1.625	.510	.750	1.890	
24	1-1/2-18	.625	1.307	1.145	.750	.672		1.750	.573	.781	2.170	
26	1-3/4-18		1.526	1.365				2.000	.643	.822		
32	2 -18		1.776	1.615				2.250	.808	1.156	2.656	
36	2-1/4-16		1.995	1.830			2.322	2.500	.915	1.250	2.922	
40	2-1/2-16		2.245	2.045				2.750	1.023	1.562	3.326	

NOTES:

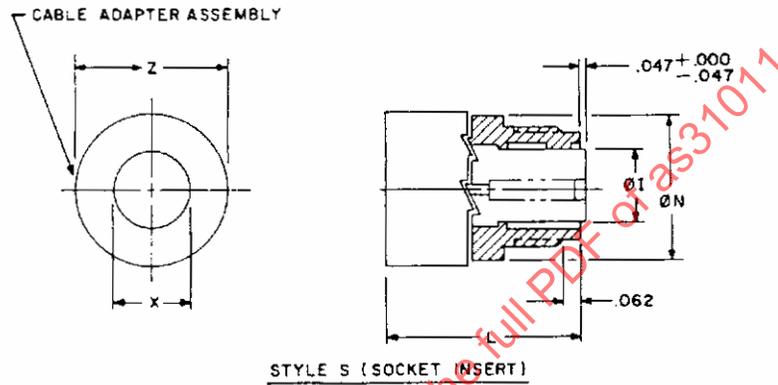
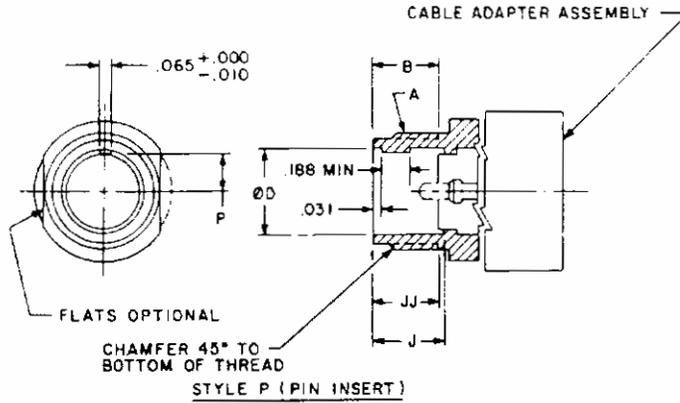
- (a) CLASS R IS INACTIVE FOR NEW DESIGN AFTER 1 JAN 1991. FOR NEW DESIGN USE MS3451W WITH THE APPROPRIATE M85049/31 BACKSHELL. FOR SHIPBOARD JACKETED CABLES USE MS3401.
- (b) ADD .375 FOR SIZE "0" CONTACTS.
- (c) MS3101R CONNECTORS REPLACE AND ARE INTERCHANGEABLE WITH CORRESPONDING MS3101E AND AN3101E CONNECTORS WITHOUT SADDLE TYPE CABLE CLAMP.

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.

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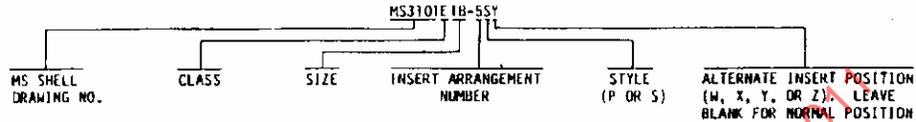
CLASS E - ENVIRONMENT RESISTANT

SIZE	A COUPLING THREAD	B MIN USABLE THREAD	D + .015 - .000 Ø	Ø1 MIN INSERT	J + .031 - .000 INT SHELL SHLD	JJ + .031 - .031 INSERT LOCATION	L MIN OVERALL LENGTH	P MIN Ø OUTSIDE KEY HEIGHT	MM MAX CLOSED	X MIN CABLE CLEARANCE	Z MAX ACROSS WIRE GROMMET SEAL	FOR INSERT ARRANGEMENT SEE	
85	1/2-28		.370	.250				.644	.130			MIL-STD 1651	
105			.448	.320	.567	.484	2.750	.969		.172	1.046		
105A	5/8-24	.375	.448					.165	.200				
125	3/4-20		.557	.448				1.062	.274	.281	1.125		
12		.625			.750	.672	2.625						
145		.375	.644	.525	.562	.484	2.250	1.156	.263	.312	.406		1.343
14	1/8-20	.625			.750	.672	2.625						
165		.375	.807	.650	.562	.484	2.250	1.281	.375	.360	.500		1.444
16	1	.20					2.625						
18	1-1/8-28		.932	.770			2.688	1.344	.385	.422	.531		1.609
20	1-1/4-18		1.058	.925			2.750	1.500	.463	.531	.656		1.890
27	1-3/8-18	.625	1.187	1.020	.750	.672		1.625	.510		.740		
24	1-1/2-18		1.307	1.145			2.969	1.750	.573	.594	.781		2.170
26	1-3/4-18		1.526	1.365			3.031	2.000	.683		.922		
32	2	.18	1.776	1.615				2.250	.808	.790	1.156		2.656
36	2-1/4-16		1.995	1.830				3.281	2.500	.915	1.250		2.922
40	2-1/2-16		2.245	2.045			3.500	2.750	1.023	1.100	1.562	3.531	

NOTES:

- (a) CLASS E IS CANCELLED AFTER 1 JAN 1991. USE MS3101F AS A REPLACEMENT FOR MS3101E WITH SADDLE TYPE CLAMP AND MS3101R FOR MS3101E WITHOUT SADDLE TYPE CLAMP. MANUFACTURERS MAY CONTINUE TO SUPPLY CLASS E UNTIL 1 JAN 1992 OR EXHAUST THEIR INVENTORIES, WHICHEVER COMES FIRST. FOR NEW DESIGN USE MS3451W WITH THE APPROPRIATE M85049/31 BACKSHELL. FOR SHIPBOARD JACKETED CABLES USE MS3401.
- (b) ADD .375 FOR SIZE "0" CONTACTS.
- (c) MS3101E CONNECTORS REPLACE AND ARE INTERCHANGEABLE WITH CORRESPONDING AN3101E 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.