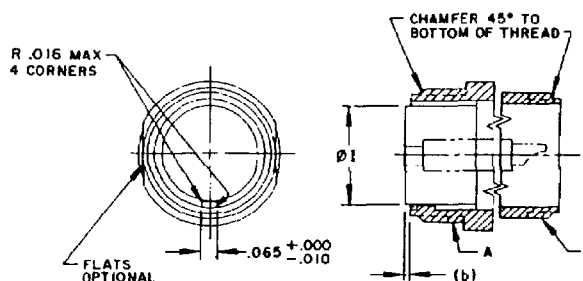
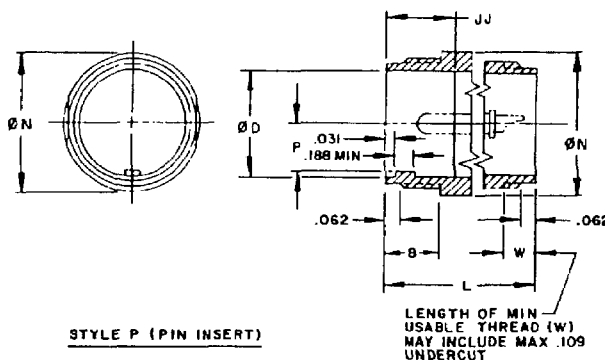


THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODISS SPECIFIED IN THE SOLICITATION: MIL-C-5015



STYLE S (SOCKET INSERT) (b)



STYLE P (PIN INSERT)

CLASS A - SOLID SHELL CLASS B - SPLIT SHELL

SIZE	A COUPLING THREAD	B MIN USABLE THREAD	D + .015 - .003 Ø INSIDE	Ø I MAX INSERT	(C) JJ + .031 - .000 INSERT LOCATION	L MAX OVERALL LENGTH	(e) N MAX OVERALL Ø OUTSIDE	P + .015 - .000 KEY HEIGHT	Y THREAD	V 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		.449	.320		1.531	.969	.165	5/8-24		
105L						1.688					
125	3/4-20		.557	.448		2.062	1.067	.224	3/4-20		
12		.625			.750	1.688	1.156	.263	7/8-20		
145	1/8-20	.375	.682	.525	.562	1.688	1.250	.325	1-20		
14		.625			.750	2.062					
165	1-20	.375	.807	.650	.562	1.688	1.344	.385	1-3/16-18		
16						2.062	1.469	.463	1-3/16-18		
18	1-1/8-18	.625	.912	.770	.750	2.188	1.594	.510	1-7/16-18		
20	1-1/4-18		1.058	.925		2.312	1.719	.573	2-1/4-15		
22	1-3/8-18		1.182	1.020		2.438	2.719	1.023	2-1/2-16		
24	1-1/2-18		1.307	1.145		2.562	2.969	1.150	3-16		
28	1-3/4-18		1.526	1.365							
32	2-1/8-18		1.776	1.615							
36	2-1/4-16		1.995	1.830							
40	2-1/2-16		2.245	2.045							
44	2-3/4-16		2.495	2.300							
48	3-16		2.745	2.550							

PREPARING ACTIVITY: NAVY-AS
CUSTODIANS: ARMY-CR NAVY-AS
AIR FORCE-85

REVIEW: ARMY-MI, AV, ME, NAVY-SH, EC, AF-99
USER: ARMY-AT, NAVY-OS, MC, CG
PROJECT NUMBER: 5935-3888

MILITARY SPECIFICATION SHEET
TITLE: CONNECTOR, PLUG, ELECTRIC,
CABLE CONNECTING, SOLDER
CONTACTS, AN TYPE

SPECIFICATION SHEET NUMBER
MS3101 20 AUG 92
REV D

SUPERSEDING
MS3101 C 31 AUG 90
AMSC- N/A FSC 5935

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited

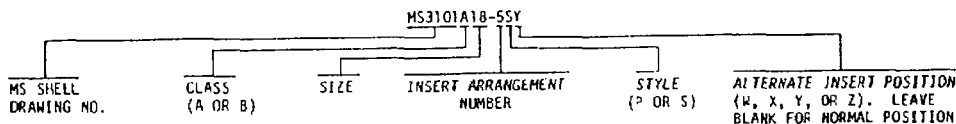
Page 1 of 8

THIS SPECIFICATION IS APPROVED FOR USE
BY ALL DEPARTMENTS AND AGENCIES OF THE
DEPARTMENT OF DEFENSE.

NOTES:

- (a) SIZES 8S 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 V.
- (f) CONNECTORS MS3101A (OR B) REPLACE AND ARE INTERCHANGEABLE WITH CORRESPONDING AN3101A (OR B) CONNECTORS.

EXAMPLE OF PART NUMBER:



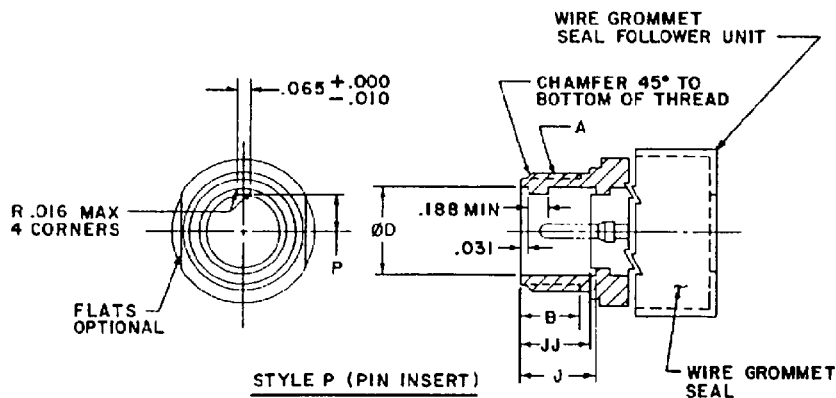
DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS $\pm .016$.
THIS SPECIFICATION SHEET TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.

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.

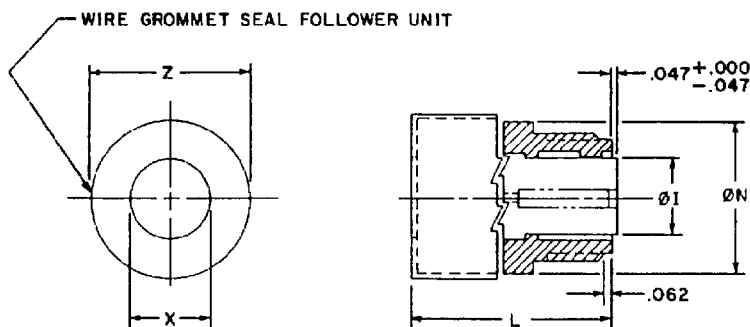
④ DENOTES CHANGE

PREPARING ACTIVITY: NAVY-AS CUSTODIANS: ARMY-CR NAVY-AS AIR FORCE-BS REVIEW: ARMY-MI, AV, ME, NAVY-SH, EC, AF-99 USER: ARMY-AT, NAVY-OS, MC, CG PROJECT NUMBER: 5935-3888	MILITARY SPECIFICATION SHEET TITLE CONNECTOR, PLUG, ELECTRIC, CABLE CONNECTING, SOLDER CONTACTS, AN TYPE	SPECIFICATION SHEET NUMBER 20 AUG 92 MS3101 REV D SUPERSEDING 31 AUG 90 MS3101 C ANSC- N/A FSC 5935
DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.		Page 2 of 8

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODISS SPECIFIED IN THE SOLICITATION: MIL-C-5015



STYLE P (PIN INSERT)



STYLE S (SOCKET INSERT)

CLASS R - ENVIRONMENT RESISTANT

SIZE	X COUPLING THREAD	B MIN USABLE THREAD	D +.016 -.000 Ø INSIDE	ØI MAX INSERT	J +.031 -.000 INT SHELL SHELL DR	JJ +.031 INSERT LOCATION	(A) L MAX OVERALL LENGTH	N MAX OUTSIDE	P +.015 -.000 KEY HEIGHT	X CABLE CLEARANCE MIN	Z MAX ACROSS NUT	FOR INSERT ARRANGEMENT SEE
85	1/2-28		.370	.250				.844	.130	.172	1.046	MIL-STD-1651
105	5/8-24	.375	.448	.320	.562	.484	1.838	.969	.165			
105L												
125	3/4-20		.557	.448				1.062	.224	.281	1.125	
12		.625			.750	.672	2.181					
145		.375			.562	.484	1.838					
14	7/8-20	.625	.682	.525	.750	.672	2.181	1.156	.263	.406	1.343	
165		.375			.562	.484	1.838					
16	1 -20		.807	.650			2.181	1.281	.325	.500		
18	1-1/8-18		.932	.770				1.344	.385	.531	1.609	
20	1-1/4-18		1.058	.925				1.500	.463	.656		
22	1-3/8-18		1.182	1.020			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	
28	1-3/4-18		1.526	1.365				2.000	.683	.922		
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		2.215	2.045				2.750	1.023	1.512	3.328	

PREPARING ACTIVITY: NAVY-AS
CUSTODIANS: ARMY-CR NAVY-AS
AIR FORCE-85

REVIEW: ARMY-M1, AV, ME, NAVY-SH, EC, AF-99
USER: ARMY-AT, NAVY-OS, MC, CG
PROJECT NUMBER: 5935-3888

MILITARY SPECIFICATION SHEET
TITLE CONNECTOR, PLUG, ELECTRIC,
CABLE CONNECTING, SOLDER
CONTACTS, AN TYPE

SPECIFICATION SHEET NUMBER 20 AUG 92
MS3101 REV D
SUPERSEDING 31 AUG 90
MS3101 C
AMSC- N/A FSC 5935

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

Page 3 of 8

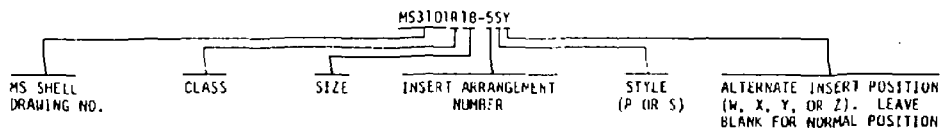
THIS SPECIFICATION IS APPROVED FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE.

CLASSIFIED BY 14-00000-1

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 MS101E AND AN101E CONNECTORS WITHOUT SADDLE TYPE CABLE CLAMP.

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.

① DENOTES CHANGE

PREPARING ACTIVITY: NAVY-AS CUSTODIANS: ARMY-CR NAVY-AS AIR FORCE-85 REVIEW: ARMY-M1, AV, ME, NAVY-SH, EC, AF-99 USER: ARMY-AT, NAVY-OS, MC, CG PROJECT NUMBER: 5935-3888	MILITARY SPECIFICATION SHEET TITLE CONNECTOR, PLUG, ELECTRIC, CABLE CONNECTING, SOLDER CONTACTS, AN TYPE	SPECIFICATION SHEET NUMBER MS3101 20 AUG 92 REV D SUPERSEDING MS3101 C 31 AUG 90 ANSC- N/A FSC 5935
DISTRIBUTION STATEMENT A. Approved for public release, distribution is unlimited.		Page <u>4</u> of <u>8</u>

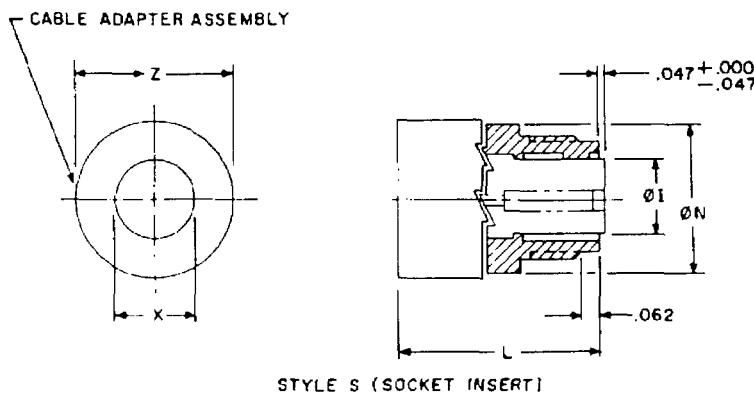
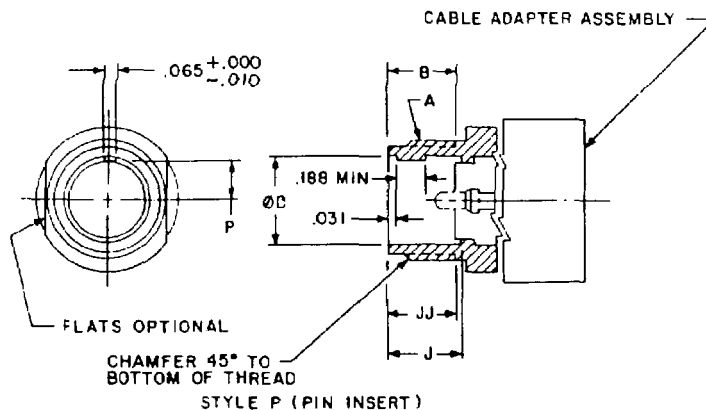
THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODISS SPECIFIED IN THE SOLICITATION MIL-C-5015

THIS SPECIFICATION IS FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE.

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODISS SPECIFIED IN THE SOLICITATION: MIL-C-5015

THIS SPECIFICATION IS APPROVED FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE.

Form approved
OMB No. 0704-0188



CLASS E - ENVIRONMENT RESISTANT

SIZE	A COUPLING THREAD	R MIN USABLE THREAD	D +.015 -.000 Ø INSIDE	ØS MAX INSERT	J +.031 -.000 Ø INT SHELL SHELL	ØC +.031 INSERT LOCATION	ØL MAX OVERALL LENGTH	R MAX Ø OUTSIDE	P +.015 -.000 Ø KEY HEIGHT	ØN MAX CLOSED	J MIN CABLE CLEARANCE	Z MAX GROSS WIRE GROMMET SIL	FOR INSERT ARRANGEMENT SEE
85	1/2-28		.370	.250				.644	.130				MIL-STD 1651
105				.320				.909			.172	1.046	
105H	5/8-24	.175	.442		.562	.484	2.250		.165	.200			
125	3/4-20		.557	.442				1.062	.224		.281	1.125	
12		.525			.750	.672	2.625						
145		.175			.562	.484	2.250						
14	7/8-20	.625	.642	.575	.750	.672	2.625	1.158	.263	.312	.406	1.343	
165		.175			.562	.484	2.250						
16	1-20		.837	.650				1.281	.375	.360	.500	1.484	
18	1-1/8-18		.932	.770				2.688	1.344	.385	.422	.53	1.609
20	1-1/4-8		1.058	.925				2.750	1.500	.463	.531	.656	1.890
22	1-1/8-18	.625	1.187	1.070	.750	.672		1.625	.510		.740		
24	1-1/2-18		1.307	1.145				2.965	1.750	.573	.594	.78	2.170
26	1-3/4-18		1.526	1.365				3.031	2.000	.683	.922		
32	2-18		1.776	1.615				2.750	.808		1.156	2.856	
36	2-1/4-16		1.995	1.830				1.281	2.500	.975	1.253	2.922	
40	2-1/2-16		2.245	2.045				3.500	2.750	1.073	1.562	3.531	

PREPARING ACTIVITY NAVY-AS
CUSTODIANS: ARMY-CR NAVY-AS
AIR FORCE-85

REVIEW: ARMY-M1, AV, ME, NAVY-SH, EC, AF-99
USER: ARMY-AT, NAVY-OS, MC, CG
PROJECT NUMBER: 5935-3888

MILITARY SPECIFICATION SHEET
TITLE CONNECTOR, PLUG, ELECTRIC,
CABLE CONNECTING, SOLDER
CONTACTS, AN TYPE

SPECIFICATION SHEET NUMBER 20 AUG 92
REV D

MS3101

SUPERSEDING MS3101 C 31 AUG 90

AMSC N/A FSC 5935

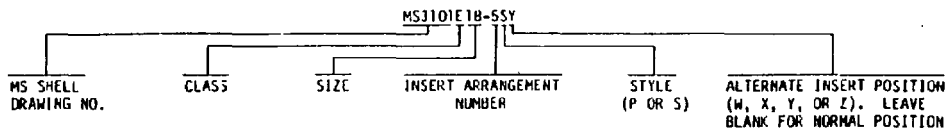
DISTRIBUTION STATEMENT A Approved for public release. distribution is unlimited

Page 5 of 8

NOTES:

- ① (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.

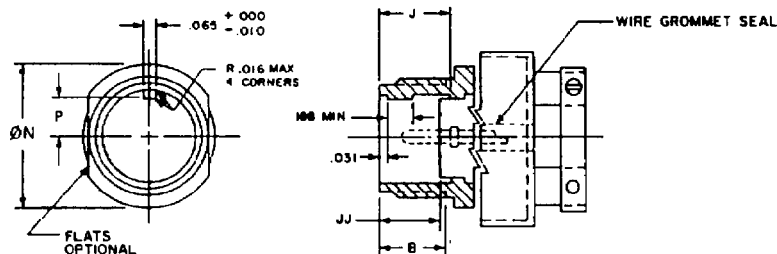
EXAMPLE OF PART NUMBER:



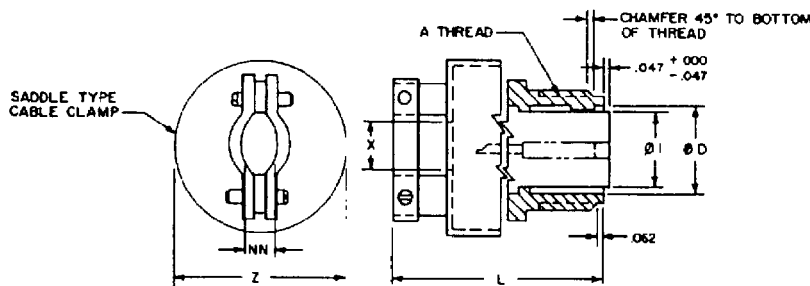
DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS $\pm .016$.
THIS SPECIFICATION SHEET TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.

① DENOTES CHANGE

PREPARING ACTIVITY: NAVY-AS CUSTODIANS: ARMY-CR NAVY-AS AIR FORCE-85 REVIEW: ARMY-MI, AV, ME, NAVY-SH, EC, AF-99 USER: ARMY-AT, NAVY-OS, MC, CG PROJECT NUMBER: 5935-3888	MILITARY SPECIFICATION SHEET TITLE CONNECTOR, PLUG, ELECTRIC, CABLE CONNECTING, SOLDER CONTACTS, AN TYPE	SPECIFICATION SHEET NUMBER MS3101 20 AUG 92 REV D SUPERSEDING MS3101 C 31 AUG 90 ANSC- N/A FSC 5935
DISTRIBUTION STATEMENT <u>A</u> Approved for public release; distribution is unlimited.		Page <u>6</u> of <u>8</u>



STYLE P (PIN INSERT)



STYLE S (SOCKET INSERT)

CLASS F - ENVIRONMENT RESISTANT

SIZE	A COUPLING THREAD	B MTR USABLE THREAD	D +.015 -.000 Ø INSIDE	Ø I MAX INSERT	J +.031 -.000 INT SHELL SHLDR	J3 +.031 INSERT LOCATION	(A) L MAX OVERALL LENGTH	N MAX Ø OUTSIDE	P +.015 -.000 KEY HEIGHT	W MAX CLOSED	I MIN CABLE CLEARANCE	Z MAX ACROSS WIRE GROMMET SEAL	FOR INSERT ARRANGEMENT SEE
85	1/2-28		.370	.250				.844	.130				MIL-STD 1651
105	5/8-24	.375	.448	.320	.562	.484	2.250	.969	.165		.172	1.046	
105L										.200			
125	3/4-20		.557	.448				1.062	.224		.281	1.175	
12		.625			.750	.672	2.625						
145		.375	.682	.525	.562	.484	2.250	1.156	.263	.312	.406	1.343	
14	7/8-20	.625			.750	.672	2.625						
165		.375	.807	.650	.562	.484	2.250	1.281	.325	.360	.500	1.484	
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	.443	.531	.656	1.890	
22	1-3/8-18	.625	1.182	1.020	.750	.672		1.625	.510		.743		
24	1-1/2-18		1.307	1.145			2.969	1.750	.573	.594	.781	2.170	
28	1-3/4-18		1.526	1.365			3.031	2.000	.683		.922		
32	2 -18		1.716	1.615			2.750	.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	

PREPARING ACTIVITY: NAVY-AS
CUSTODIANS: ARMY-CR NAVY-AS
AIR FORCE-B5

REVIEW: ARMY-MI, AV, ME, NAVY-SH, EC, AF-99
USER: ARMY-AT, NAVY-OS, MC, CG
PROJECT NUMBER: 5935-3888

MILITARY SPECIFICATION SHEET
TITLE CONNECTOR, PLUG, ELECTRIC,
CABLE CONNECTING, SOLDER
CONTACTS, AN TYPE

SPECIFICATION SHEET NUMBER 20 AUG 92
MS3101 REV D

SUPERSEDING MS3101 C 31 AUG 90

AMSC- N/A FSC 5935

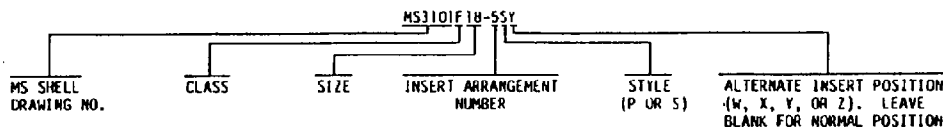
DISTRIBUTION STATEMENT A Approved for public release, distribution is unlimited

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NOTES:

- (D) (a) CLASS F IS INACTIVE FOR NEW DESIGN AFTER 1 JAN 1991. FOR NEW DESIGN USE MS3451W WITH APPROPRIATE M85049/52 BACKSHELL. FOR SHIPBOARD JACKETED CABLES USE MS3401.
(b) ADD .375 FOR SIZE "0" CONTACTS.
(c) MS3101F CONNECTORS REPLACE AND ARE INTERCHANGEABLE WITH CORRESPONDING MS3101E AND AN3101E CONNECTORS WITH SADDLE CLAMPS.

EXAMPLE OF PART NUMBER:



DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS +.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.

(D) DENOTES CHANGE

PREPARING ACTIVITY: NAVY-AS CUSTODIANS: ARMY-CR NAVY-AS AIR FORCE-85 REVIEW: ARMY-MI, AV, ME, NAVY-SH, EC, AF-99 USER: ARMY-AT, NAVY-OS, MC, CG PROJECT NUMBER: 5935-3888	MILITARY SPECIFICATION SHEET TITLE CONNECTOR, PLUG, ELECTRIC, CABLE CONNECTING, SOLDER CONTACTS, AN TYPE	SPECIFICATION SHEET NUMBER MS3101 20 AUG 92 REV D SUPERSEDING MS3101 C 31 AUG 90 AMSC- N/A FSC 5935
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DISTRIBUTION STATEMENT A Approved for public release; distribution is unlimited.

Page 8 of 8

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODIGS SPECIFIED IN THE SOLICITATION: MIL-C-5015

THIS SPECIFICATION IS APPROVED FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE.

Standard State Requirements