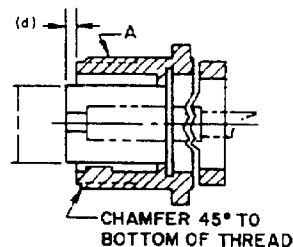
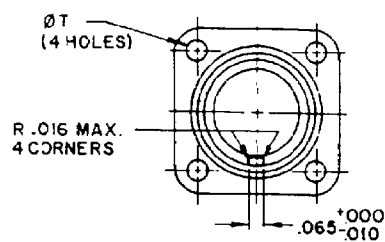
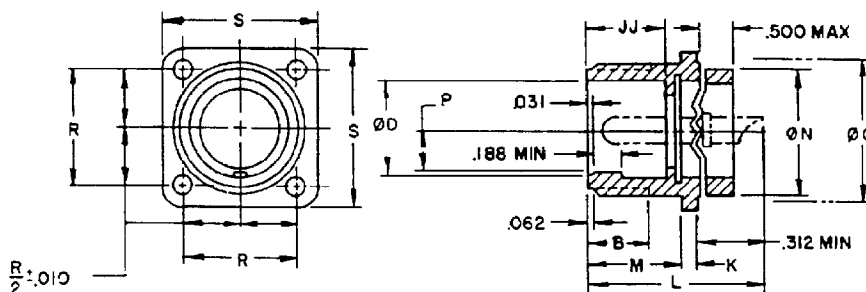


Form approved
OMB No. 0704-0188

STYLE S (SOCKET INSERT)

CLASS A-SOLID SHELL
CLASS C-PRESSURIZED

STYLE P (PIN INSERT)

SIZE	A COUPLING THREAD	B MIN USABLE THREAD	D +.015 MAX -.000 Ø INSIDE	Ø I MAX INSERT	(C) JJ +.031 MAX INSERT LOCATION	K THICKNESS MOUNTING FLANGE MAX MIN	L MAX OVERALL LENGTH	M +.031/-.000 MOUNTING FLANGE LOCATION	Ø P +.000 MOUNTING HOLE Ø OUTSIDE	Ø O (ref) +.015 MAX MOUNTING HOLE	P +.005 MAX KEY HEIGHT	R +.005 MAX CL MOUNTING HOLE	S +.031 MAX LENGTH SIDE	Ø T +.010/-.005 MOUNTING BOLT HOLE	FOR INSERT ARRANGEMENT SEE DRAWING
85	1/2-29		.370	.250					.532	.562	.130	.594	.875		
105	5/8-24	.375	.448	.320	.562		1.191	.562	.656	.688	.165	.719	1.000		
105L															
125	3/4-20	.625	.557	.448	.750	.156	.062		.782	.812	.224	.812	1.094		
12								1.713	.750						
145	7/8-20	.375	.680	.525	.562			1.191	.562	.906	.938	.263	.906	1.168	.120
14		.625			.750			1.713	.750						
165	1-20	.375	.807	.650	.562			1.191	.562	1.032	1.062	.325	.969	1.281	
16								1.750							
18	1-1/8-18		.532	.770					1.156	1.188	.385	1.062	1.375		
20	1-1/4-18		1.058	.925					1.282	1.312	.463	1.156	1.500		
22	1-3/8-18	.625	1.182	1.020	.750	.203	.094	1.938	1.406	1.438	.510	1.250	1.625		
24	1-1/2-18		1.307	1.145					1.532	1.562	.573	1.375	1.750		
28	1-3/4-18		1.526	1.365					1.782	1.812	.683	1.562	2.000	.147	
32	2-18		1.776	1.615					2.032	2.062	.803	1.750	2.250		
36	2-1/4-16		1.995	1.830					2.282	2.312	.915	1.938	2.500		
40	2-1/2-16		2.245	2.045		.359	.125		2.532	2.562	1.023	2.188	2.750	.173	
44	2-3/4-16		2.495	2.300				.875	2.782	2.812	1.150	2.375	3.000		
48	3-16		2.745	2.550					3.032	3.062	1.275	2.625	3.250		

PREPARING ACTIVITY: NAVY-AS

CUSTODIANS ARMY-CR

NAVY-AS

AIR FORCE-B5

NASA-NA

REVIEW ARMY-MI, AV, ME, NAVY-SH, EC, AF-99

USER: ARMY-AT, NAVY-OS, MC, CG

PROJECT NUMBER: 5935-3889

MILITARY SPECIFICATION SHEET

TITLE CONNECTOR, RECEPTACLE,
ELECTRIC, BOX MOUNTING,
SOLDER CONTACTS, AN TYPE

SPECIFICATION SHEET NUMBER

MS3102

20 AUG 92

REV E

SUPERSEDING
MS3102 D

31 AUG 90

AMSC- N/A

FSC 5935

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

Page 1 of 7

DD FORM 672 MAY 1988

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14 2994

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 DODDS SPECIFIED IN THE SOLICITATION MIL-C-5015THIS SPECIFICATION IS APPROVED 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

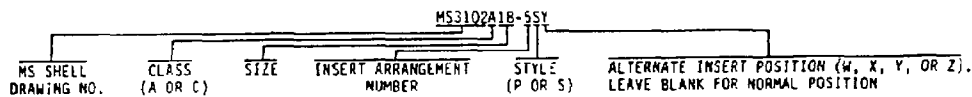
THIS SPECIFICATION IS APPROVED FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE.

Form approved
OMB No. 0704-0188

NOTES:

- (E) (a) SIZES 85 THROUGH 40 OF CLASSES A AND C ARE CANCELLED AFTER 1 JAN 1991. FOR REPLACEMENT PURPOSES USE MS3102R. MANUFACTURERS MAY CONTINUE TO SUPPLY THESE SIZES OF CLASSES A AND C UNTIL 1 JAN 1992 OR EXHAUST THEIR INVENTORIES, WHICHEVER COMES FIRST. FOR NEW DESIGN USE MS3452W. FOR SHIPBOARD JACKETED APPLICATIONS USE MS3402.
- (b) SIZES 44 AND 48 OF CLASSES A AND C 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 BEYOND OR .032 MAXIMUM BELOW SHELL. SOCKET INSERT OF RESILIENT MATERIAL SHALL EXTEND .047 $\pm$.000-.047 BEYOND SHELL AS SHOWN.
- (e) FOR SHELL SIZES 36 AND 40, H TOLERANCE $\pm$.000, $\pm$.250
- (f) CONNECTORS MS3102A (OR C) REPLACE AND ARE INTERCHANGEABLE WITH CORRESPONDING AM3102A (OR C) CONNECTORS.

EXAMPLE OF PART NUMBER:



DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS $\pm$.015.
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 AGREEMENT NEPR 28 WHEN AMENDMENT, REVISION OR CANCELLATION OF THIS SPECIFICATION SHEET IS PROPOSED WHICH WILL MODIFY THE INTERNATIONAL STANDARDIZATION 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.

(E) DENOTES CHANGE

PREPARING ACTIVITY: NAVY-AS	MILITARY SPECIFICATION SHEET	SPECIFICATION SHEET NUMBER	20 AUG 92
CUSTODIANS: ARMY-CR NAVY-AS	TITLE CONNECTOR, RECEPTACLE,	MS3102	REV E
AIR FORCE-85 NASA-NA	ELECTRIC, BOX MOUNTING,	SUPERSEDING	31 AUG 90
REVIEW: ARMY-MI, AV, ME, NAVY-SH, EC, AF-99	SOLDER CONTACTS, AN TYPE	MS3102 D	
USER: ARMY-AT, NAVY-OS, MC, CG		AMSC- N/A	FSC 5935
PROJECT NUMBER: 5935-3889			
DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited		Page 2 of 7	

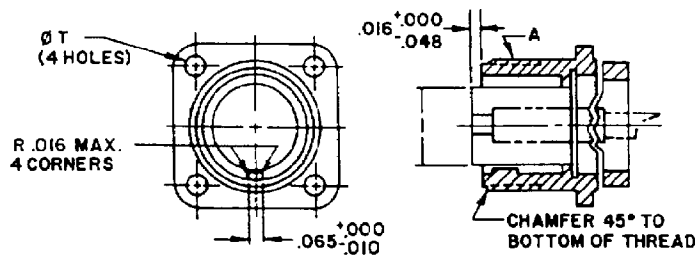
DD FORM 672 MAY 1988

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

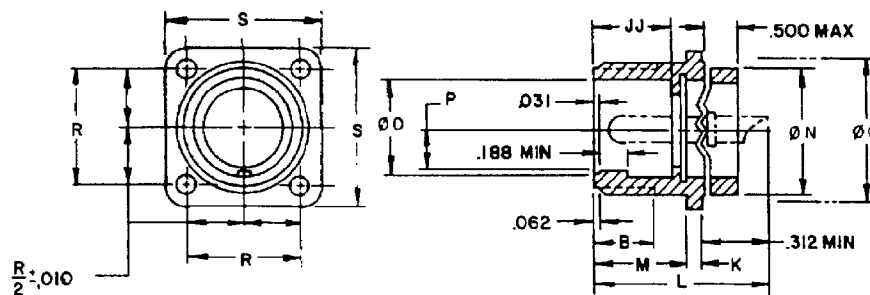
113998

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 DODDS SPECIFIED IN THE SOLICITATION: MIL - C-5015

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



STYLE S (SOCKET INSERT)



STYLE P (PIN INSERT)

CLASS K-FIREWALL

[illegible]

PREPARING ACTIVITY: NAVY-AS

CUSTODIANS: ARMY - CR NAVY - AS

AIR FORCE-85 NASA-NA

REVIEW: ARMY-MI, AV, ME, NAVY-SH, EC, AF-99

USER: ARMY-AT, NAVY-OS, MC, CG

PROJECT NUMBER 5935-3889

MILITARY SPECIFICATION SHEET

TIT. E CONNECTOR, RECEPTACLE,
ELECTRIC, BOX MOUNTING,
SOLDER CONTACTS, AN TYPE

SPECIFICATION SHEET NUMBER

MS3102

20 AUG 92
REV E

SUPERSEDING

MS3102 D

31 AUG 90

AMSC -

N/A

FSC 5935

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Page 3 of 7

DD FORM 672 MAY 1988

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142004

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

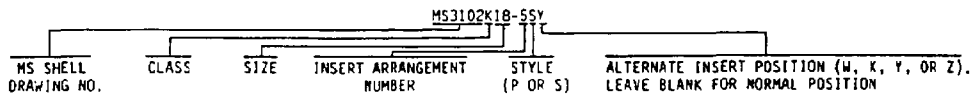
THIS SPECIFICATION IS APPROVED FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE.

Form approved
OMB No. 0704-0188

NOTES:

- (E) (a) CLASS K IS INACTIVE FOR NEW DESIGN AFTER 1 JAN 1991. FOR NEW DESIGN USE MS3452K.
FOR SHIPBOARD JACKETED CABLE USE MS3402.
(b) CONNECTORS MS3102K REPLACE AND ARE INTERCHANGEABLE WITH CORRESPONDING AN3102K 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.

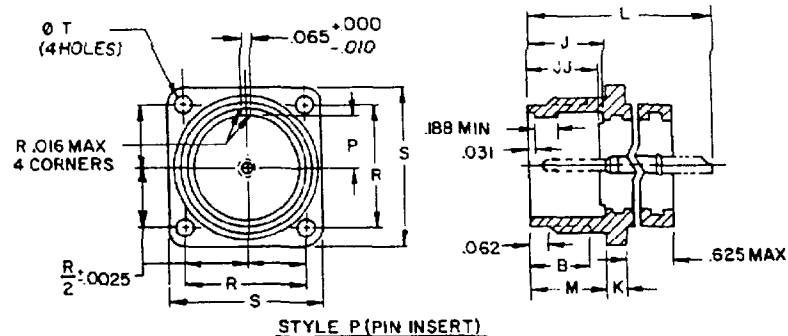
(E) DENOTES CHANGE

PREPARING ACTIVITY: NAVY - AS CUSTODIANS: ARMY - CR NAVY - AS AIR FORCE - B5 NASA - NA REVIEW: ARMY - M1, AV, ME, NAVY - SH, EC, AF-99 USER: ARMY - AT, NAVY - OS, MC, CG PROJECT NUMBER 5935-3889	MILITARY SPECIFICATION SHEET TITLE CONNECTOR, RECEPTACLE, ELECTRIC, BOX MOUNTING, SOLDER CONTACTS, AN TYPE	SPECIFICATION SHEET NUMBER MS3102 20 AUG 92 REV E SUPERSEDING MS3102 0 31 AUG 90 AMSC- N/A FSC 5935
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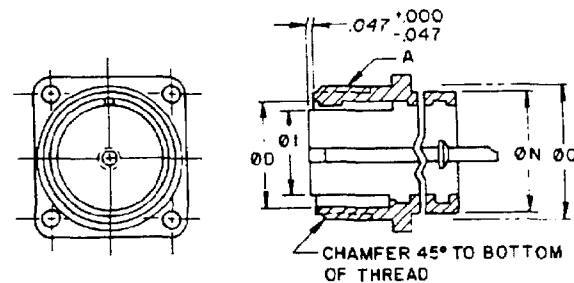
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THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODISS SPECIFIED IN THE SOLICITATION: MIL - C - 5015



STYLE P (PIN INSERT)



STYLE S (SOCKET INSERT)

CLASS E - ENVIRONMENT RESISTANT

SIZE	A COUPLING THREAD	B MIN USABLE THREAD	D $\pm .015$ MAX $\pm .0005$ ϕ INSIDE	E1 MAX INSERT	J $\pm .031$ MAX $\pm .000$ INT SHELL SHLDR	JJ $\pm .031$ MAX INSERT LOCATION	K THICKNESS MOUNTING FLANGE MAX MIN	L MAX OVERALL LENGTH	M $\pm .031$ MAX $\pm .000$ MOUNTING FLANGE LOCATION	(a) N $\pm .000$ (ref) MOUNTING HOLE	P $\pm .015$ MAX $\pm .000$ KEY HEIGHT	R $\pm .005$ MAX CL-C MOUNTING HOLE	S $\pm .031$ MAX LENGTH SIDE	#T $\pm .010$ MAX MOUNTING BOLT HOLE	FOR INSERT ARRANGEMENT SEE
8S	1/2-28		.370	.250						.532	.562	.130	.594	.875	
10S	5/8-24	.375	.448	.320	.562	.484		1.188	.562	.656	.688	.165	.719	1.000	
10SL															
12S	3/4-20		.557	.448						.782	.812	.224	.812	1.094	
12		.625			.750	.672	.156 .078	1.625	.750						
14S	7/8-20	.375	.682	.525	.562	.484		1.188	.562	.906	.938	.261	.906	1.186	
14		.625			.750	.672		1.625	.750						
16S	1-20	.375	.807	.650	.562	.484		1.188	.562	1.032	1.062	.325	.969	1.281	
16								1.625							
18	1-1/8-18		.932	.770					.750	1.556	1.188	.385	1.062	1.375	
20	1-1/4-18		1.058	.925						1.782	1.312	.463	1.156	1.500	
22	1-3/8-18		1.182	1.020			.203 .094			1.406	1.438	.513	1.250	1.625	
24	1-1/2-18	.625	1.307	1.145	.750	.672		1.938	.812	1.532	1.562	.573	1.375	1.750	
28	1-3/4-18		1.526	1.365						1.782	1.812	.683	1.562	2.000	
32	2-18		1.776	1.615						2.032	2.062	.808	1.750	2.250	
36	2-1/4-16		1.995	1.830			.359 .125		.875	2.282	2.312	.915	1.938	2.500	.173
40	2-1/2-16		2.245	2.047						2.532	2.562	1.023	2.188	2.750	

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

PREPARING ACTIVITY NAVY-AS
CUSTODIANS: ARMY-CR NAVY-AS
AIR FORCE-85 NASA-NA
REVIEW: ARMY-M1, AV, ME, NAVY-SH, EC, AF-99
USER: ARMY-AT, NAVY-OS, MC, CG
PROJECT NUMBER 5935-3689

MILITARY SPECIFICATION SHEET
TITLE CONNECTOR, RECEPTACLE,
ELECTRIC, BOX MOUNTING,
SOLDER CONTACTS, AN TYPE

SPECIFICATION SHEET NUMBER 20 AUG 92
MS3102 REV E
SUPERSEDING MS3102 D 31 AUG 90
AWSC- N/A FSC 5935

DISTRIBUTION STATEMENT A Approved for public release, distribution is unlimited

Page 5 of 7

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

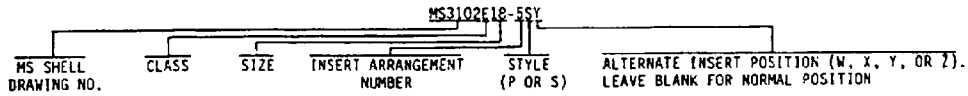
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Form approved
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NOTES:

- (E) (a) CLASS E IS CANCELLED AFTER 1 JAN 1991. FOR REPLACEMENT PURPOSES USE MS3102R. MANUFACTURERS MAY CONTINUE TO SUPPLY CLASS E UNTIL 1 JAN 1992 OR EXHAUST THEIR INVENTORIES, WHICHEVER COMES FIRST. FOR NEW DESIGN USE MS3452W. FOR SHIPBOARD JACKETED CABLES USE MS3402.
(b) FOR SHELL SIZE 36 AND 40, K TOLERANCE IS +.000, -.250
(c) CONNECTORS MS3102E REPLACE AND ARE INTERCHANGEABLE WITH CORRESPONDING AN3102E CONNECTORS.

PART NUMBER EXAMPLE:



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.

(E) DENOTES CHANGE

PREPARING ACTIVITY: NAVY-AS CUSTODIANS: ARMY-CR NAVY-AS AIR FORCE-85 NASA-NA REVIEW: ARMY-MI, AV, ME, NAVY-SH, EC, AF-99 USER: ARMY-AT, NAVY-OS, MC, CG PROJECT NUMBER: 5935-3889	MILITARY SPECIFICATION SHEET TITLE CONNECTOR, RECEPTACLE, ELECTRIC, BOX MOUNTING, SOLDER CONTACTS, AN TYPE	SPECIFICATION SHEET NUMBER MS3102 20 AUG 92 REV E SUPERSEDING MS3102 D 31 AUG 90 AMSC- N/A FSC 5935
DISTRIBUTION STATEMENT A. Approved for public release, distribution is unlimited.		Page 6 of 7

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142294

GRAPHIC STATE REPRODUCED

THIS SPECIFICATION IS APPROVED FOR USE
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DEPARTMENT OF DEFENSE.

Technical drawing of a square nut. The left view is a front view showing a square outer profile with four circular holes at the corners. The right view is a side view showing the internal thread. Dimensions include: overall length L , thread diameter ϕD , and a chamfer dimension of 0.47 ± 0.000 to -0.047 . A note indicates: "CHAMFER 45° TO BOTTOM OF THREAD".

[illegible]

(a) CLASS R IS INACTIVE FOR NEW DESIGN AFTER 1 JAN 1991. FOR NEW DESIGN USE MS3452W.
FOR SHIPBOARD JACKETED CABLES USE MS3402.

(b) FOR SHELL SIZE 36 AND 40 H TOLERANCE IS .000 - .250.

(c) CONNECTORS MS3102R REPLACE AND ARE INTERCHANGEABLE WITH CORRESPONDING MS3102E AND AN3102E CONNECTORS.

PART NUMBER EXAMPLE:

MS SHELL DRAWING NO.	CLASS	SIZE	INSERT ARRANGEMENT NUMBER	STYLE (P OR S)	ALTERNATE INSERT POSITION (W, X, Y, OR Z). LEAVE BLANK FOR NORMAL POSITION
				MS3102R1P-55Y	

PREPARING ACTIVITY NAVY-AS CUSTODIANS: ARMY-CR NAVY-AS AIR FORCE-85 NASA-NA REVIEW: ARMY-MI, AV, ME, NAVY-SH, FC, AF-99 USER ARMY-AT, NAVY-OS, MC, CG PROJECT NUMBER 5935-3889	MILITARY SPECIFICATION SHEET TITLE CONNECTOR, RECEPTACLE, ELECTRIC, BOX MOUNTING, SOLDER CONTACTS, AN TYPE	SPECIFICATION SHEET NUMBER MS3102 20 AUG 92 REV E SUPERSEEDING MS3102 0 31 AUG 90 AMSC- N/A FSC 5935
DISTRIBUTION STATEMENT A Approved for public release; distribution is unlimited		Page <u>7</u> of <u>7</u>