**INCH-POUND** 

MS3120G 29 April 2009 SUPERSEDING MS3120F 6 June 2003

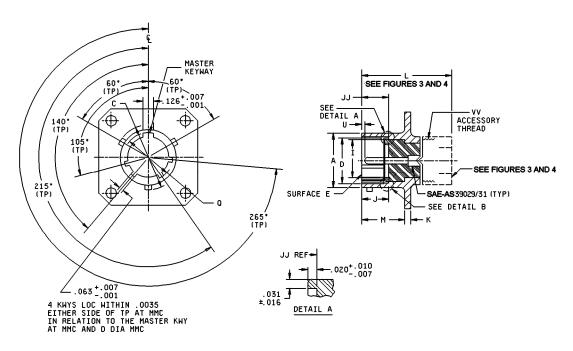
### **DETAIL SPECIFICATION SHEET**

CONNECTORS, RECEPTACLE, ELECTRICAL, CRIMP TYPE, WALL MOUNTING, FLANGE, NO. 4 HOLES, BAYONET COUPLING, SERIES 1, CLASSES E, F AND P

Inactive for new design after 5 September 1975.

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification and MIL-DTL-26482.



STYLE P (PIN INSERT)

FIGURE 1. Receptacle, dimensions, classes E, F and P.

AMSC N/A FSC 5935

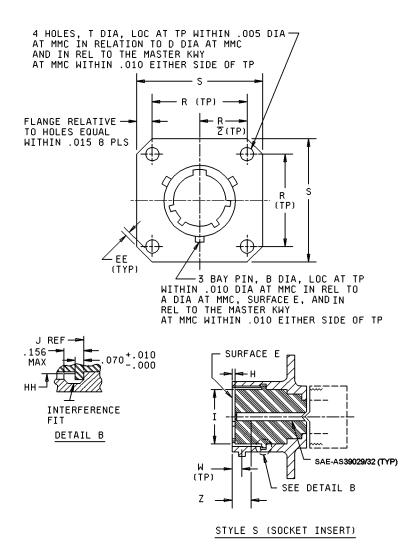


FIGURE 1. Receptacle, dimensions, classes E, F and P - Continued.

MS3120G

	Α	В	С	D	Н
Shell	dia	+.006	dia	dia	+.000
size	+.001	002	+.000	+.005	020
	005	bay	016	001	socket
	OD	pin	over	ID	insert
		dia	bay pins		location
8	.473		.563	.362	
10	.590		.680	.490	
12	.750		.859	.607	.025
14	.875	.078	.984	.732	.025
16	1.000	.076	1.108	.857	
18	1.125		1.233	.962	
20	1.250		1.358	1.087	
22	1.375		1.483	1.212	.087
24	1.500	.125	1.610	1.337	

	I	J	JJ	K	M
Shell	max	±.010	+.000	+.016	+.031
size	insert	packing	020	thick	000
	dia	location	pin	mounting	mounting
			insert	flange	flange
			location		location
8	.285				
10	.402				
12	.516	.382 (9.70)	.332	.062	.431
14	.641	.362 (9.70)	(8.43)	(1.57)	(10.95)
16	.766				
18	.855				
20	.980				.556
22	1.105	.444	.394	.094	(14.12)
24	1.229	(11.28)	(10.01)	(2.39)	.589 (14.96)

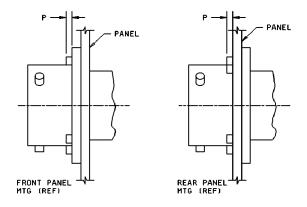
FIGURE 1. Receptacle, dimensions, classes E, F and P – Continued.

	Q	R	S	Т	U
Shell	+.005	(TP)	max	±.005	+.010
size	006	mounting	length	dia	020
	dia	holes	side	mounting	pin
	over			holes	contact
	keyways				location
8	.412	.594	.828		
10	.540	.719	.954		
12	.689	.812	1.047		
14	.814	.906	1.141	.120 (3.05)	.085 (2.16)
16	.939	.969	1.234	.120 (3.03)	
18	1.039	1.062	1.326		
20	1.164	1.156	1.453		
22	1.289	1.250	1.578		.147 (3.73)
24	1.414	1.375	1.703	.147 (3.73)	

	W	Z	VV	
Shell	(TP)	+.000	class 2A	EE
size	bày pin	078	accessory	min
	location	socket contact	thread	edge
		spring location		dist
		(see note 2)		
8			7/16-28	.035 (0.89)
10			9/16-24	
12		152 (2.90)	11/16-24	
14	.100 (2.54)	.153 (3.89)	13/16-20	.035 (0.89)
16	.100 (2.54)		15/16-20	
18			1-1/16-18	
20			1-3/16-18	
22		.215 (5.46)	1-5/16-18	.050 (1.27)
24	.109 (2.77)		1-7/16-18	

- 1. Dimensions are in inches. Metric equivalents are given for information only.
- 2. Distance between end of shell and the point at which a gage pin having the same basic diameter as the mating contact and a square face first engages socket contact spring.
- 3. Packing material shall meet the requirements of ASTM-D2000.
- 4. True position (TP) tolerances specified are in accordance with ASME Y14.5M.

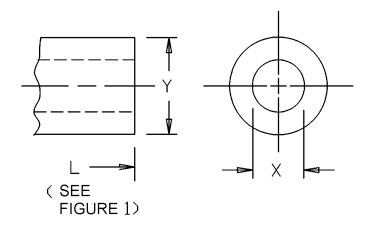
FIGURE 1. Receptacle, dimensions, classes E, F and P - Continued.



Shell	HH	Р
size	max ID gasket	max
8	.329 (8.36)	
10	.457 (11.61)	
12	.564 (14.33)	007 (0.04)
14	.689 (17.50)	.087 (2.21)
16	.814 (20.68)	
18	.907 (23.04)	
20	1.039 (26.39)	
22	1.164 (29.57)	.212 (5.38)
24	1.289 (32.74)	

- 1. Dimensions are in inches. Metric equivalents are given for information only.
- 2. Intermateability dimensions shall be in accordance with MIL-DTL-26482.

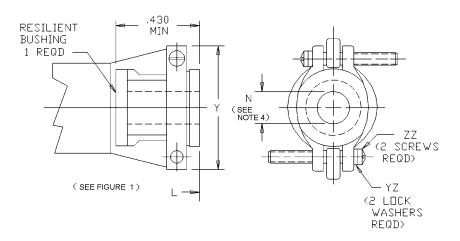
FIGURE 2. Panel dimensions, classes E, F and P.



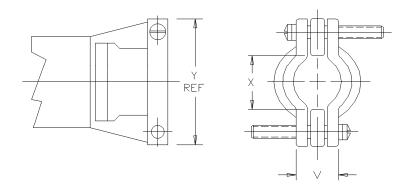
	L	Х	Y
Shell	max	dia	dia
size	over-all	min	max
	length	ID	OD
8		.259 (6.58)	.608 (15.44)
10	1.552	.359 (9.12)	.734 (18.64)
12		.469 (11.91)	.858 (21.79)
14	(39.42)	.589 (14.96)	.984 (24.99)
16		.717 (18.21)	1.110 (28.19)
18		.779 (19.79)	1.234 (31.34)
20	4.700	.901 (22.89)	1.360 (34.54)
22	1.709 (43.41)	1.009 (25.63)	1.484 (37.69)
24		1.123 (28.52)	1.610 (40.89)

- Dimensions are in inches. Metric equivalents are given for information only.
  Intermateability dimensions shall be in accordance with MIL-DTL-26482.

FIGURE 3. Receptacle, dimensions, class E.



# **Bushing installed**



# **Bushing removed**

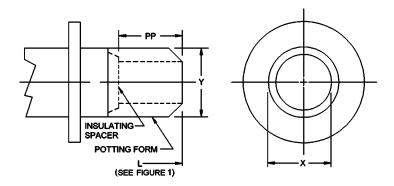
FIGURE 4. Receptacle, dimensions, class F.

	L	Х	Υ	V
Shell	max	dla	max	max
size	over-all	min		closed
	length	open		
8		.234 (5.94)	.828 (21.03)	.187 (4.75)
10	2.422	.297 (7.54)	.891 (22.63)	.187 (4.75)
12	(61.52)	.422 (10.72)	1.016 (25.81)	.281 (7.14)
14		.547 (13.89)	1.141 (28.98)	.325 (8.26)
16		.609 (15.47)	1.203 (30.56)	.356 (9.04)
18	2.537			.456 (11.58)
	(64.44)	.734 (18.64)	1.469 (37.31)	
20				
22	2.824 (71.73)	.922 (23.42)	1.656 (42.06)	.519 (13.18)
24	2.900 (73.66)	.984 (24.99)	1.750 (44.45)	.657 (16.69)

Shell	N	ZZ	YZ
size	free dia	screw	lock washers NASM35338 or NASM35333
	(see note 4)	threads	TVACINGSSSS OF TVACINGSSSS
8	.125 (3.18)		
10	.188 (4.78)		NASM35338 -98 or -41
12	.312 (7.92)	6-32 UNC	NASM35333
14	.375 (9.53)		-105 or -37
16	.500 (12.70)		
18	.625 (15.88)		
20	.625 (15.88)		NASM35338 -99 or -42
22	.750 (19.05)	8-32 UNC	NASM35333
24	.800 (20.32)		-106 or-38

- 1. Dimensions are in inches. Metric equivalents are given for information only.
- 2. Intermateability dimensions shall be in accordance with MIL-DTL-26482.
- 3. Use MS3420 bushing if reduced opening is required.
- 4. Lockwashers may be captivated.

FIGURE 4. Receptacle, dimensions, class F – Continued.



	L	X	Y	PP
Shell	max	dia	dia	min
size	over-all length	min	max	
		ID	OD	
8		.317 (8.05)	.608 (15.44)	
10		.434 (11.02)	.734 (18.64)	
12	1 675 (40 55)	.548 (13.92)	.858 (21.79)	
14	1.675 (42.55)	.673 (17.09)	.984 (24.99)	
16		.798 (20.27)	1.110 (28.19)	.250 (6.35)
18		.899 (22.83)	1.234 (31.34)	
20	1.963 (49.86)	1.024 (26.01)	1.360 (34.54)	
22	1.963 (49.86)	1.149 (29.18)	1.484 (37.69)	
24	2.025 (51.44)	1.274 (32.36)	1.610 (40.89)	

- Dimensions are in inches. Metric equivalents are given for information only.
  Intermateability dimensions shall be in accordance with MIL-DTL-26482.

FIGURE 5. Receptacle, dimensions, class P – Continued.

#### REQUIREMENTS:

Dimensions and configuration: See figures 1 through 5.

Connector mating: This connector mates with MS3121 and MS3126.

Insert arrangement shall be in accordance with MIL-STD-1669.

Sealing member: Bonded to vitreous insert.

Packing material shall meet the requirements of ASTM-D2000.

Finishes: A finish designator shall not be included in the PIN when finish W is required.

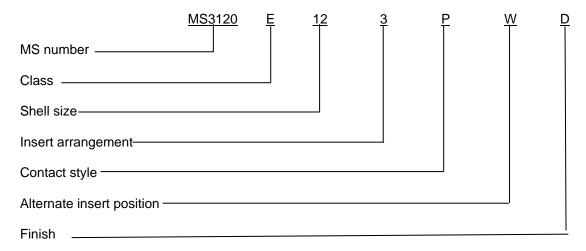
See MIL-DTL-26482 for available finishes D, T and Z for classes E, F and P.

Material:

a. Shell - aluminum alloy.

b. Bayonet pins (B dia) - stainless steel, passivated.

Part or Identifying Number (PIN) example:



Note: No finish designator is used when finish W is required (finish W is the default finish).

Changes from previous issue: Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Referenced documents: In addition to MIL-DTL-26482, this document references the following:

MIL-STD-1669 MS3121 MS3126 SAE-AS39029/31 SAE-AS39029/32 ASME Y14.5M ASTM D2000 NASM35333 NASM35338

### **CONCLUDING MATERIAL**

Custodians: Army - CR Air Force - 85 DLA - CC Preparing activity: DLA - CC

(Project 5935-2007-181)

Review activities: Army - CR4, MI Air Force - 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <a href="http://assist.daps.dla.mil">http://assist.daps.dla.mil</a>.