MS3111E 29 April 2009 SUPERSEDING MS3111D 1 March 2007

#### **DETAIL SPECIFICATION SHEET**

CONNECTORS, PLUG, ELECTRICAL, SOLDER TYPE, CABLE CONNECTING, BAYONET COUPLING, SERIES 1, CLASSES E, F, J AND P

Inactive for new design after 15 December 1998. For new design, use MS3476.

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 sheet and MIL-DTL-26482.

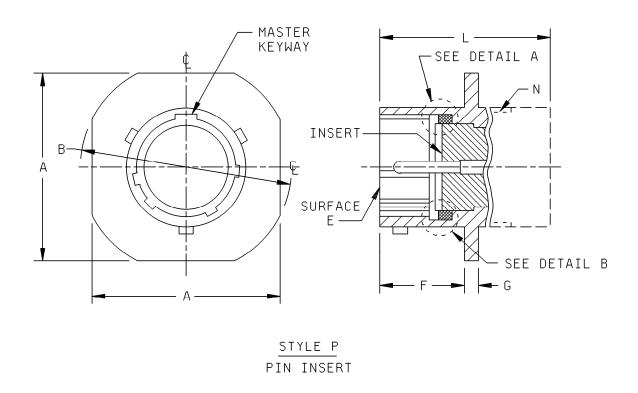
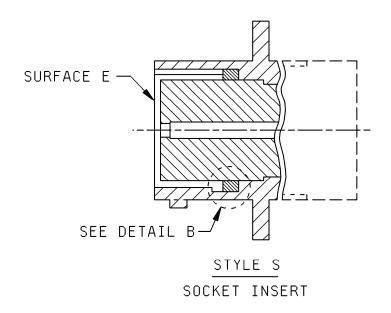


FIGURE 1. Plug, classes E, F, J, and P, pin and socket inserts.

AMSC N/A FSC 5935



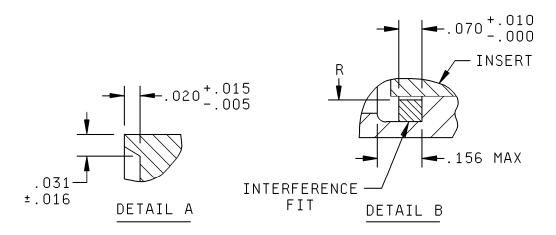


FIGURE 1. Plug, classes E, F, J, and P, pin and socket inserts - Continued.

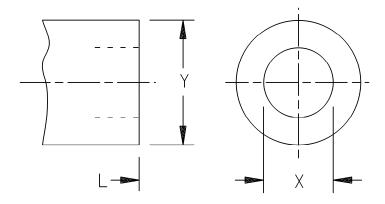
Shell size	A max length	B dia ± .020 across flange corners	F + .031 000 mounting flange location	G ± .016 thick mounting flange	N UNEF-2A accessory thread	R max ID gasket
8	.828 (21.03)	.938 (23.83)			.4375-28	.329 (8.36)
10	.954 (24.23)	1.062 (26.97)	.400 (10.16)		.5625-24	.457 (11.61)
12	1.047 (26.59)	1.156 (29.36)		.094 (2.39)	.6875-24	.564 (14.33)
14	1.141 (28.98)	1.250 (31.75)		.094 (2.59)	.8125-20	.689 (17.50)
16	1.234 (31.34)	1.344 (34.14)			.9375-20	.814 (20.68)
18	1.328 (33.73)	1.438 (36.53)			1.0625-18	.907 (23.04)
20	1.453 (36.91)	1.562 (39.67)	.535 (13.59)		1.1875-18	1.039 (26.39)
22	1.578 (40.08)	1.688 (42.88)	.555 (15.59)	.115 (2.92)	1.3125-18	1.164 (29.57)
24	1.700 (43.18)	1.812 (46.02)	.558 (14.17)		1.4375-18	1.289 (32.74)

Inches	mm	Inches	mm
.005	0.13	.020	0.51
.010	0.25	.031	0.79
.015	0.38	.070	1.78
.016	0.41	.156	3.96

## **INSERT STYLES P AND S**

- 1. Dimensions are in inches. Metric equivalents are given for information only.
- 2. True position (TP) tolerances specified are in accordance with ASME Y14.5M.
- 3. Intermateability dimensions shall be in accordance with MIL-DTL-26482.

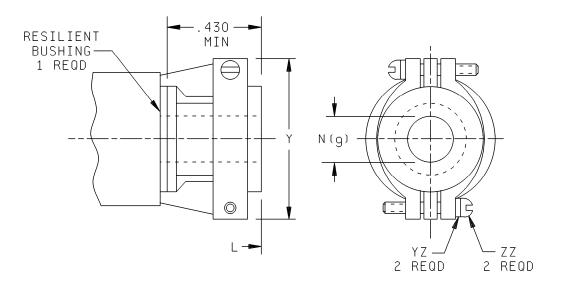
FIGURE 1. Plug, classes E, F, J, and P, pin and socket inserts - Continued.



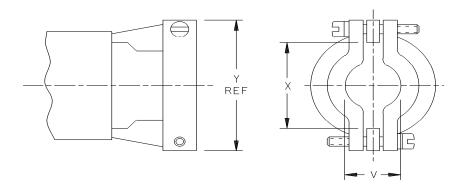
Shell size	L max overall length	X dia min ID	Y dia max OD
8		.259 (6.58)	.608 (15.44)
10		.359 (9.12)	.734 (18.64)
12	1.328 (33.73)	.469 (11.91)	.858 (21.79)
14	1.520 (55.75)	.589 (14.96)	.984 (24.99)
16		.727 (18.47)	1.110 (28.19)
18		.779 (19.79)	1.234 (31.34)
20	1.531 (38.89)	.901 (22.89)	1.360 (34.54)
22	1.001 (00.09)	1.009 (25.63)	1.484 (37.69)
24	1.594 (40.49)	1.123 (28.52)	1.610 (40.89)

- 1. Dimensions are in inches. Metric equivalents are given for information only.
- 2. True position (TP) tolerances specified are in accordance with ASME Y14.5M.
- 3. Intermateability dimensions shall be in accordance with MIL-DTL-26482.

FIGURE 2. Plug, rear accessories configurations, class E.



## CLASS F, WITH BUSHING



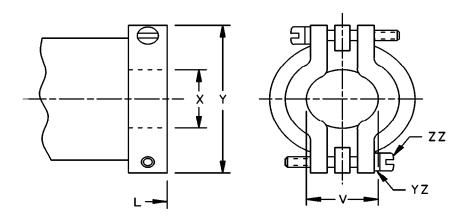
# CLASS F, WITH BUSHING REMOVED

FIGURE 3. Plug, rear accessories configurations, class F.

Shell size	L max overall length	X dia min open	Y dia max	N (see note 4) ± .010 free dia	ZZ screw threads	YZ (see note 5) Lockwashers NASM 35338 or NASM 35333 types
8		.234 (5.94)	.828 (21.03)	.125 (3.18)	6-32 UNC	NASM 35338
10	4 000 (40 00)	.297 (7.54)	.891 (22.63)	.188 (4.78)		-98 or -41
12	1.922 (48.82)	.422 (10.72)	1.016 (25.81)	.312 (7.92)		NASM 35333 -105 or -37
14		.547 (13.89)	1.161 (29.49)	.375 (9.53)		-10301-37
16	2.047 (51.99)	.609 (15.47)	1.203 (30.56)	.500 (12.70)		
18	2.078 (52.78)	704 (40 04)	4 400 (07 04)	.625 (15.88)		NASM 35338 -99 or -42
20	0.044 (50.54)	.734 (18.64)	1.469 (37.31)	.625 (15.88)	8-32 UNC	NASM 35333
22	2.344 (59.54)	.922 (23.42)	.922 (23.42) 1.656 (42.06)			-106 or -38
24	2.406 (61.11)	.984 (24.99)	1.750 (44.45)	.800 (20.32)		

- 1. Dimensions are in inches. Metric equivalents are given for information only.
- 2. True position (TP) tolerances specified are in accordance with ASME Y14.5M.
- 3. Intermateability dimensions shall be in accordance with MIL-DTL-26482.
- 4. Use MS3420 bushing if reduced opening is required.
- 5. Lockwashers may be captivated.

FIGURE 3. Plug, rear accessories configurations, class F – Continued.

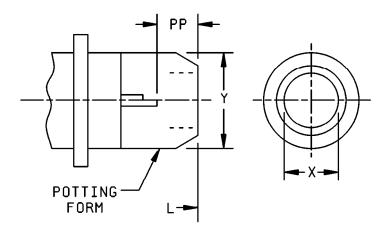


Shell size	L max overall	V max closed	X ID gland seal min range		Y dia max	ZZ screw threads	YZ (see note 4) Lockwashers NASM35338
	length	ciosed	Closed	Open	max		or NASM35333 types
8	2.271	.157 (3.99)	.168 (4.27)	.230 (5.84)	.828 (21.03)		
10	(57.68)	.187 (4.75)	.205 (5.21)	.312 (7.92)	.891 (22.63)		NASM35338 - 98 or -41
12	2.411 (61.24)	.281 (7.14)	.338 (8.59)	.442 (11.23)	1.016 (25.81)	6-32 UNC	NASM35333- 105 or -37
14	2.599 (66.01)	.325 (8.26)	.416 (10.57)	.539 (13.69)	1.141 (28.98)	0 02 0110	
16	2.943 (74.75)	.356 (9.04)	.550 (13.97)	.616 (15.65)	1.203 (30.56)		
18	3.172 (80.57)	.456 (11.58)	.600 (15.24)	.672 (17.07)	1.469		
20	3.610 (91.69)	.519 (13.18)	.635 (16.13)	.747 (18.97)	(37.31)		NASM35338 -99 or -42
22	3.766 (95.66)	.519 (15.16)	.670 (17.02)	.846 (21.49)	1.656 (42.06)	8-32 UNC	NASM35333- 106 or -38
24	3.985 (101.22)	.657 (16.69)	.760 (19.30)	.894 (22.71)	1.750 (44.45)		700 01 00

- 1. Dimensions are in inches. Metric equivalents are given for information only.
- 2. True position (TP) tolerances specified are in accordance with ASME Y14.5M.
- 3. Intermateability dimensions shall be in accordance with MIL-DTL-26482.
- 4 Lockwashers may be captivated.

FIGURE 4. Plug, rear accessories configurations, class J.

MS3111E



	L	Х	Y		
Shell	max	ax dia dia		PP	
Size	overall	min	max	min	
	length	ID	OD		
8		.317 (8.05)	.608 (15.44)		
10		.434 (11.02)	.734 (18.64)		
12	1.453 (36.91)	.548 (13.92)	.858 (21.79)		
14	1.455 (50.91)	.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	1.672 (42.47)	1.024 (26.01)	1.360 (34.54)		
22	1.072 (42.47)	1.149 (29.18)	1.686 (42.82)		
24	1.734 (44.04)	1.274 (32.36)	1.610 (40.89)		

- Dimensions are in inches. Metric equivalents are given for information only.
  True position (TP) tolerances specified are in accordance with ASME Y14.5M.
- 3. Intermateability dimensions shall be in accordance with MIL-DTL-26482.

FIGURE 5. Plug, rear accessories configurations, class P.

#### REQUIREMENTS:

Dimensions and configurations: See figures 1 through 5.

Connector mating: This connector mates with MS3110, MS3112 through MS3115, MS3119, MS3120,

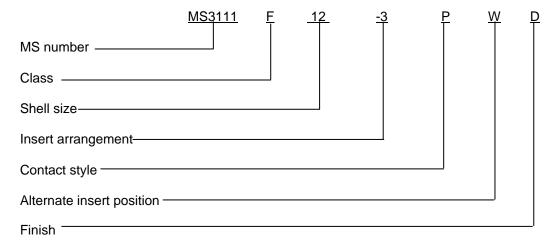
MS3122, MS3124, MS3127 and MS3128.

Intermateability dimensions are in accordance with MIL-DTL-26482.

For insert arrangement: See MIL-STD-1669.

Finishes: When finish W is required, the finish designator shall not be included in the PIN. See MIL-DTL-26482 for other finishes, including D, T and Z, available for classes E, F and P.

Part or Identifying Number (PIN) example:



Note: When finish W is required, no finish designator is used (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:

MS3110

MS3112

MS3113

MS3114

MS3115

MS3119

MS3120

MS3122

MS3124

MS3127

MS3128

MS3420

MS3476

MIL-STD-1669

ASME Y14.5M

NASM35333

NASM35338

#### **CONCLUDING MATERIAL**

Custodians:

Army - CR

Navy - AS

Air Force - 85

DLA - CC

Preparing activity: DLA - CC

(Project 5935-2007-178)

Review activities:

Army - AV

Navy - EC, SH

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>.