

INCH-POUND

MS3111F
15 January 2015
SUPERSEDING
MS3111E
29 April 2009

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 MS3471.

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.

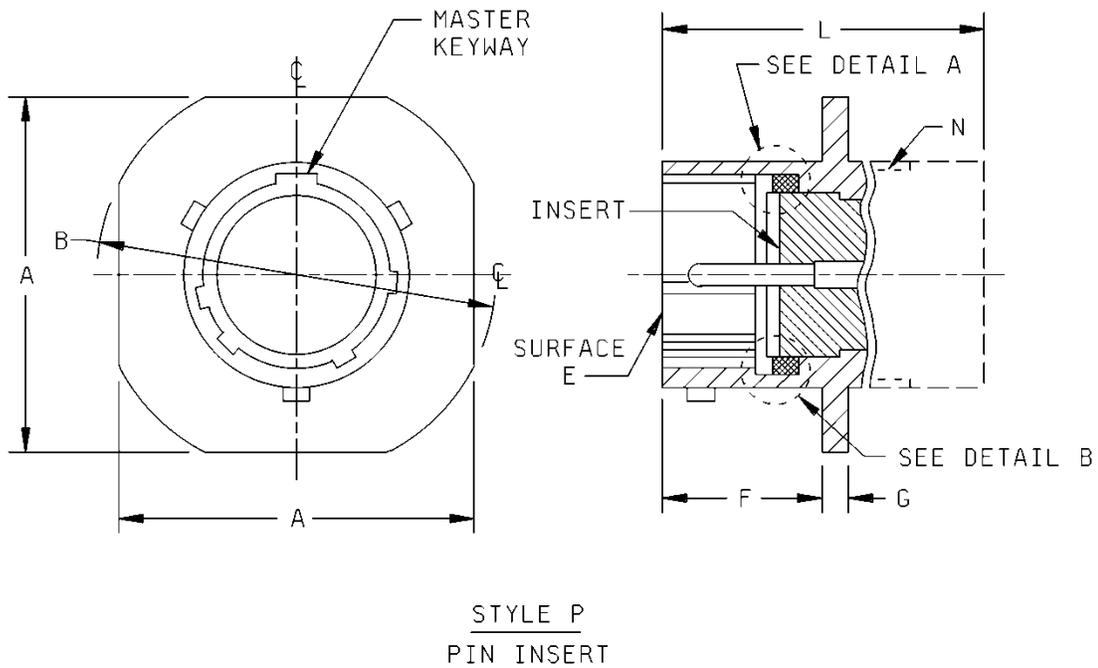


FIGURE 1. Plug, classes E, F, J, and P, pin and socket inserts.



MS3111F

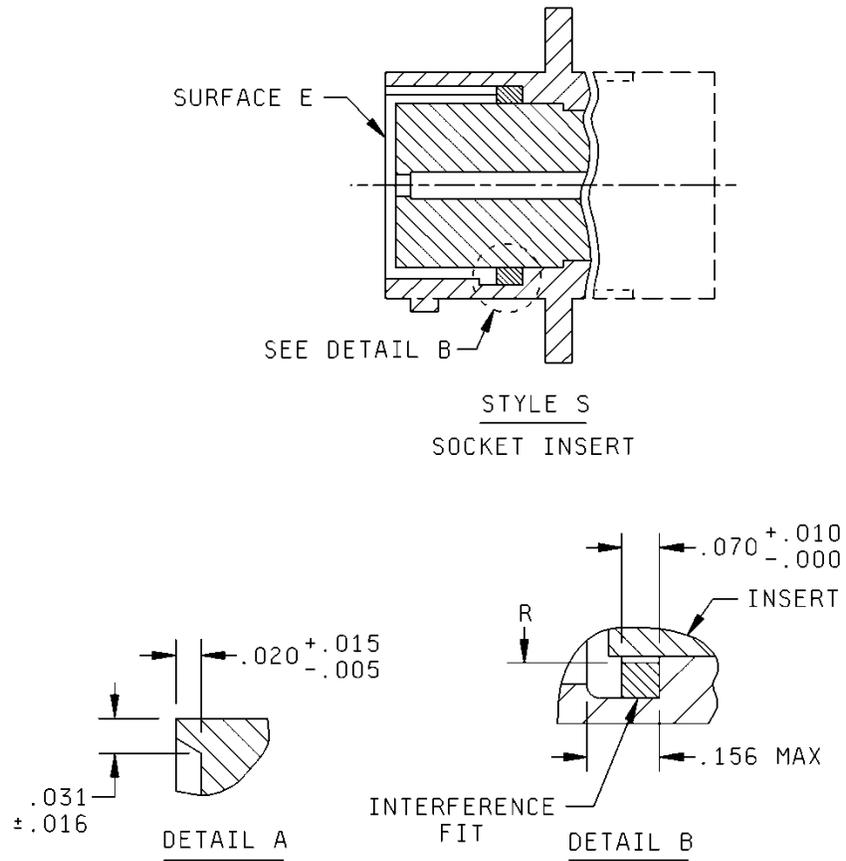


FIGURE 1. Plug, classes E, F, J, and P, pin and socket inserts - Continued.

MS3111F

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)	.400 (10.16)	.094 (2.39)	.4375-28	.329 (8.36)
10	.954 (24.23)	1.062 (26.97)			.5625-24	.457 (11.61)
12	1.047 (26.59)	1.156 (29.36)			.6875-24	.564 (14.33)
14	1.141 (28.98)	1.250 (31.75)			.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)	.115 (2.92)	1.1875-18	1.039 (26.39)
22	1.578 (40.08)	1.688 (42.88)			1.3125-18	1.164 (29.57)
24	1.700 (43.18)	1.812 (46.02)			.558 (14.17)	1.4375-18

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

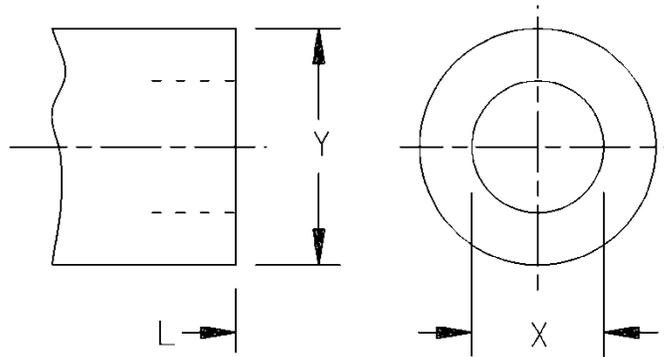
INSERT STYLES P AND S

NOTES:

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

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

MS3111F



CLASS E

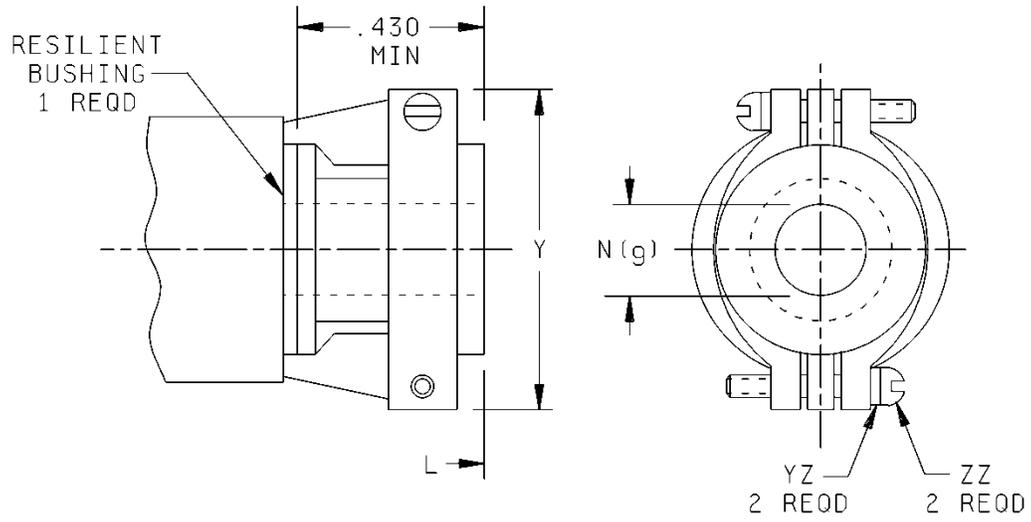
Shell size	L max overall length	X dia min ID	Y dia max OD
8	1.328 (33.73)	.259 (6.58)	.608 (15.44)
10		.359 (9.12)	.734 (18.64)
12		.469 (11.91)	.858 (21.79)
14		.589 (14.96)	.984 (24.99)
16		.727 (18.47)	1.110 (28.19)
18		.779 (19.79)	1.234 (31.34)
20	1.531 (38.89)	.901 (22.89)	1.360 (34.54)
22		1.009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

NOTES:

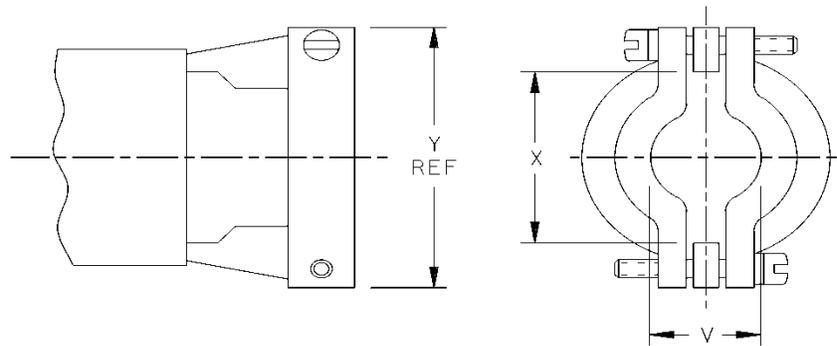
1. Dimensions are in inches. Metric equivalents are given for information only.
2. True position (TP) tolerances specified are in accordance with ASME Y14.5.
3. Intermateability dimensions shall be in accordance with MIL-DTL-26482.

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

MS3111F



CLASS F, WITH BUSHING



CLASS F, WITH BUSHING REMOVED

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

MS3111F

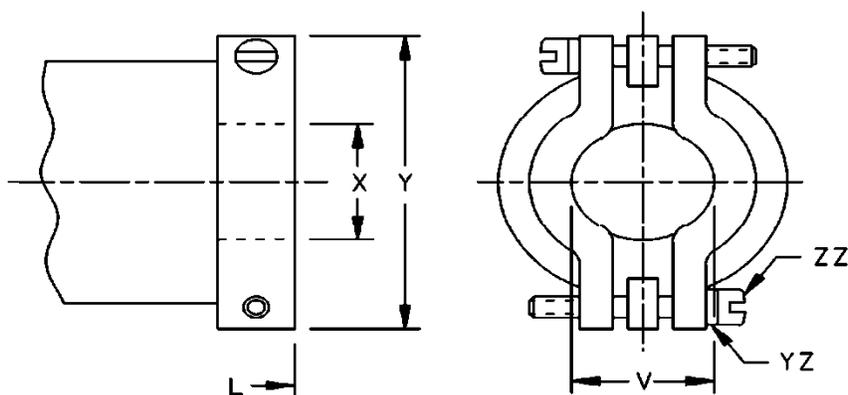
Shell size	L max overall length	X dia min open	Y dia max	N (see note 4) ± .010 free dia	ZZ screw threads	YZ (see note 5) Lockwashers NASM 35338 or NASM 35333 types
8	1.922 (48.82)	.234 (5.94)	.828 (21.03)	.125 (3.18)	6-32 UNC	NASM 35338 -98 or -41 NASM 35333 -105 or -37
10		.297 (7.54)	.891 (22.63)	.188 (4.78)		
12		.422 (10.72)	1.016 (25.81)	.312 (7.92)		
14		.547 (13.89)	1.161 (29.49)	.375 (9.53)		
16	2.047 (51.99)	.609 (15.47)	1.203 (30.56)	.500 (12.70)	8-32 UNC	NASM 35338 -99 or -42 NASM 35333 -106 or -38
18	2.078 (52.78)	.734 (18.64)	1.469 (37.31)	.625 (15.88)		
20	2.344 (59.54)			.625 (15.88)		
22		.922 (23.42)	1.656 (42.06)	.750 (19.05)		
24	2.406 (61.11)	.984 (24.99)	1.750 (44.45)	.800 (20.32)		

NOTES:

1. Dimensions are in inches. Metric equivalents are given for information only.
2. True position (TP) tolerances specified are in accordance with ASME Y14.5.
3. Intermateability dimensions shall be in accordance with MIL-DTL-26482.
4. Use SAE-AS85049/139 bushing if reduced opening is required.
5. Lockwashers may be captivated.

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

MS3111F



CLASS J

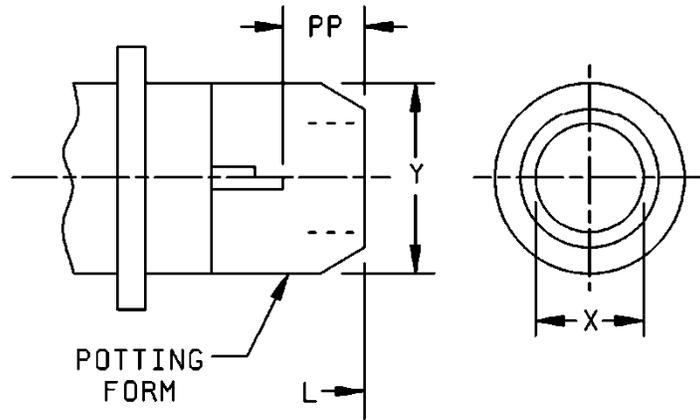
Shell size	L max overall length	V max closed	X ID gland seal min range		Y dia max	ZZ screw threads	YZ (see note 4) Lockwashers NASM35338 or NASM35333 types
			Closed	Open			
8	2.271 (57.68)	.157 (3.99)	.168 (4.27)	.230 (5.84)	.828 (21.03)	6-32 UNC	NASM35338 - 98 or -41 NASM35333-105 or -37
10		.187 (4.75)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

NOTES:

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

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

MS3111F



CLASS P

Shell Size	L max overall length	X dia min ID	Y dia max OD	PP min
8	1.453 (36.91)	.317 (8.05)	.608 (15.44)	.250 (6.35)
10		.434 (11.02)	.734 (18.64)	
12		.548 (13.92)	.858 (21.79)	
14		.673 (17.09)	.984 (24.99)	
16		.798 (20.27)	1.110 (28.19)	
18		.899 (22.83)	1.234 (31.34)	
20	1.672 (42.47)	1.024 (26.01)	1.360 (34.54)	
22		1.149 (29.18)	1.686 (42.82)	
24	1.734 (44.04)	1.274 (32.36)	1.610 (40.89)	

NOTES:

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

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

MS3111F

REQUIREMENTS:

Dimensions and configurations: See figures 1 through 5.

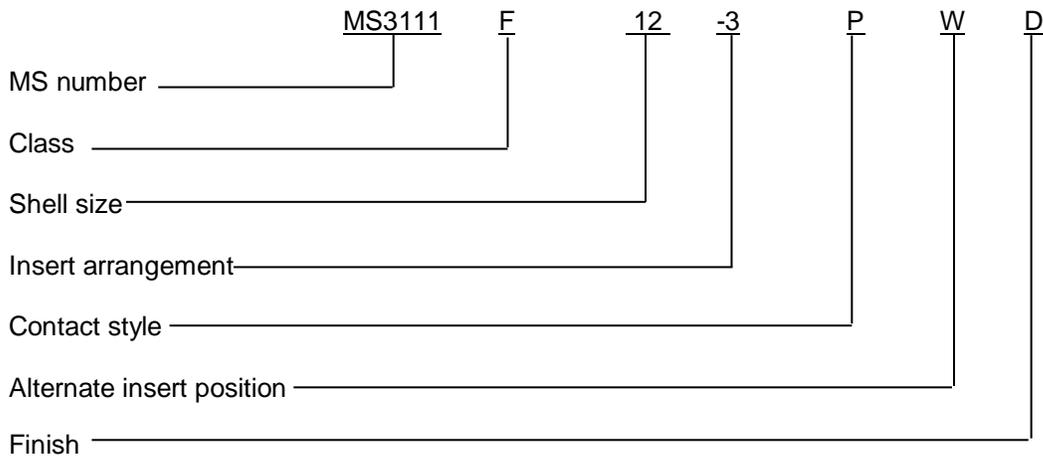
Connector mating: This cable-connecting "plug" features keyways that allow it to mate with keyed plugs. This connector mates with series 1 plugs including MS3116 and MS3126, and series 2 plugs including MS3475 and MS3476.

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 K, 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).

APPLICATION NOTE: MS3111 is similar to MS3471, except for the following: MS3471 utilizes crimp type rear release contacts, whereas plug connectors produced to this document utilize non-removable contacts with solderable terminations.

Changes from previous issue. The margins of this specification sheet are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

MS3111F

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

MS3116
MS3126
MS3471
MS3475
MS3476
MIL-STD-1669
ASME Y14.5
NASM35333
NASM35338
SAE-AS85049/139

CONCLUDING MATERIAL

Custodians:

Army - CR
Navy - AS
Air Force - 85
DLA - CC

Preparing activity:

DLA - CC

(Project 5935-2015-032)

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 <https://assist.dla.mil>.