

INCH POUND

MS3121D
 07 November 2007
 SUPERSEDING
 MS3121C
 6 June 2003

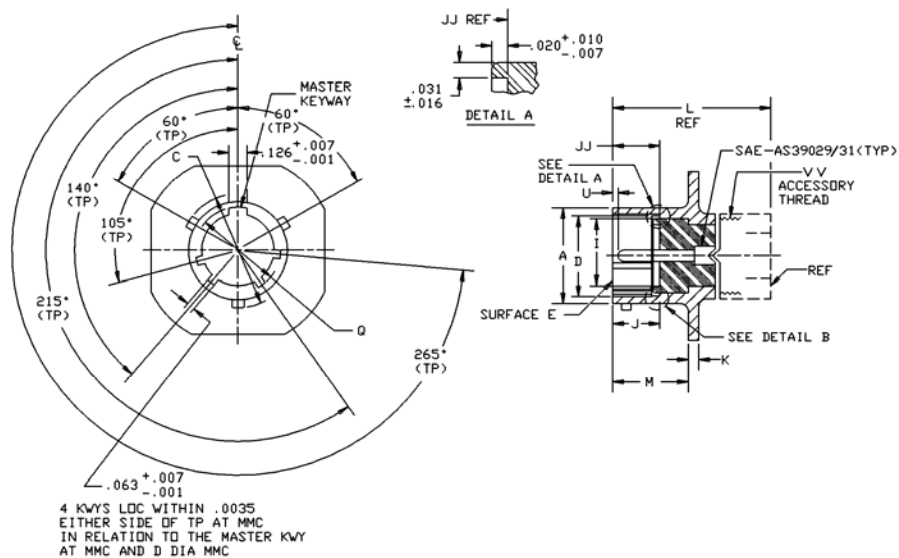
DETAIL SPECIFICATION SHEET

CONNECTORS, PLUG, ELECTRICAL, CRIMP TYPE,
 CABLE-CONNECTING, BAYONET COUPLING, 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 sheet and MIL-DTL-26482.

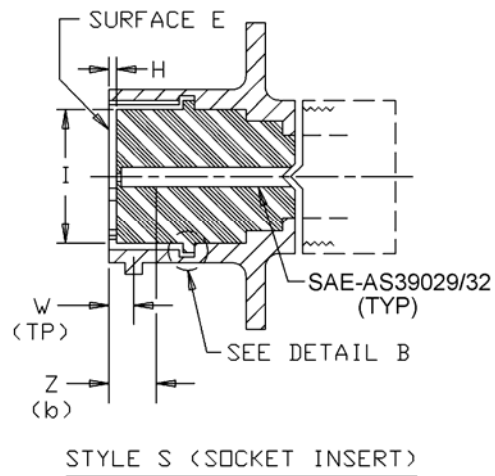
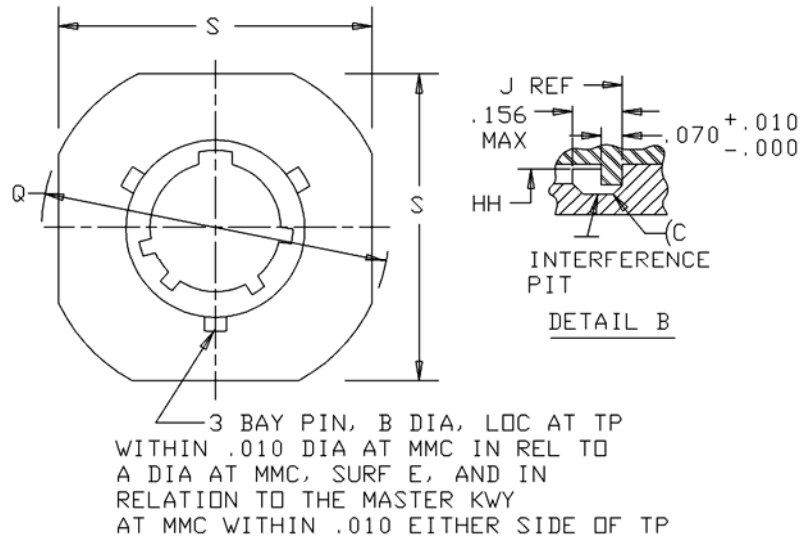


Plug, style P (pin insert)

Inches	mm
.0035	.090
.006	.406
.007	.508
.010	.787
.016	1.60
.020	.51
.031	.79
.063	1.60
.126	3.22

FIGURE 1. Dimensions for classes E, F, and P.

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Inches	mm
.010	.254
.070	1.77
.156	3.96

FIGURE 1. Dimension for classes E, F, and P - Continued.

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Size	A dia +.001 -.005 OD	B +.006 -.002 bay pin dia	C dia +.000 -.016 over bay pins	D dia +.005 -.001 ID	G dia \pm .020 across flange corners	H +.000 -.020 socket insert location
8	.473 (12.01)	.078 (1.98)	.563 (14.30)	.362 (9.19)	.938 (23.83)	.025 (.64)
10	.590 (14.99)		.680 (17.27)	.490 (12.45)	1.062 (26.97)	
12	.750 (19.05)		.859 (21.82)	.607 (15.42)	1.156 (29.36)	
14	.875 (22.23)		.984 (24.99)	.732 (18.59)	1.250 (31.75)	
16	1.000 (25.40)		1.108 (28.14)	.857 (21.77)	1.344 (34.14)	
18	1.125 (28.58)		1.233 (31.32)	.962 (24.43)	1.438 (36.53)	
20	1.250 (31.75)	.125 (3.18)	1.358 (34.49)	1.087 (27.61)	1.562 (39.67)	.087 (2.21)
22	1.375 (34.93)		1.483 (37.67)	1.212 (30.78)	1.688 (42.88)	
24	1.500 (38.10)		1.610 (40.89)	1.337 (33.96)	1.812 (46.02)	

FIGURE 1. Dimension for classes E, F, and P – Continued.

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Size	I max insert dia	J $\pm .010$ packing location	JJ +.000 -.020 pin insert location	K $\pm .016$ thick mounting flange	M +.031 -.000 mounting flange location
8	.285 (7.24)	.382 (9.70)	.332 (8.43)	.094 (2.39)	.400 (10.16)
10	.402 (10.21)				
12	.516 (13.11)				
14	.641 (16.28)				
16	.766 (19.46)				
18	.855 (21.72)				
20	.980 (24.89)	.444 (11.28)	.394 (10.01)	.115 (2.92)	.535 (13.59)
22	1.105 (28.07)				
24	1.229 (31.22)				.568 (14.43)

FIGURE 1. Dimensions for classes E, F, and P - Continued.

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Size	Q dia +.005 -.006 over keyways	S max length side	HH max ID gasket	U +.010 -.020 pin contact location
8	.412 (10.46)	.828 (21.03)	.329 (8.36)	.085 (2.16)
10	.540 (13.72)	.954 (24.23)	.457 (11.61)	
12	.689 (17.50)	1.047 (26.59)	.564 (14.33)	
14	.814 (20.68)	1.141 (28.98)	.689 (17.50)	
16	.939 (23.85)	1.234 (31.34)	.814 (20.68)	
18	1.039 (26.39)	1.326 (33.68)	.907 (23.04)	
20	1.164 (29.57)	1.453 (36.91)	1.039 (26.39)	.147 (3.73)
22	1.289 (32.74)	1.578 (40.08)	1.164 (29.57)	
24	1.414 (35.92)	1.703 (43.26)	1.289 (32.74)	

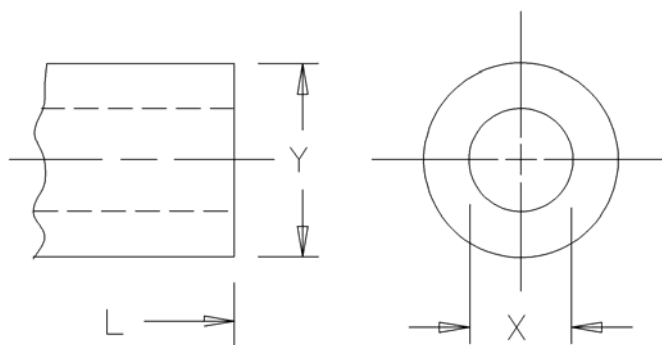
FIGURE 1. Dimensions for classes E, F, and P - Continued.

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Size	W (TP) bay pin location	Z (b) +.000 -.078 socket contact spring location	W class 2A accessory thread
8	.100 (2.54)	.153 (3.89)	7/16-28
10			9/16-24
12			11/16-24
14			13/16-20
16			15/16-20
18			1-1/16-18
20		.215 (5.46)	1-3/16-18
22			1-5/16-18
24	.109 (2.77)		1-7/16-18

FIGURE 1. Dimensions for classes E, F, and P - Continued.

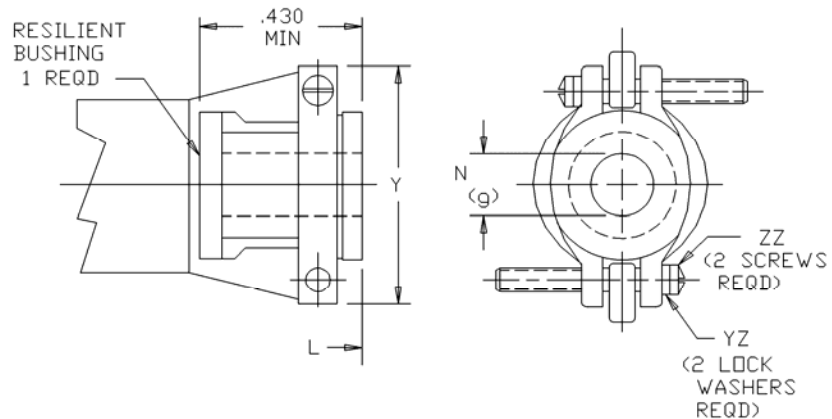
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Dimensions for class E

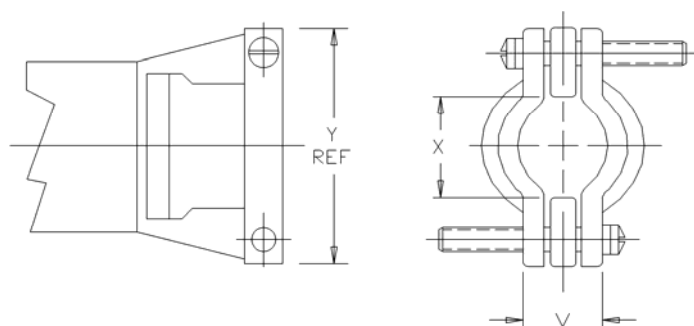
Size	L max over-all length	X dia min ID	Y dia max OD
8	1.552 (39.42)	.259 (6.58)	.608 (15.44)
10		.359 (9.12)	.734 (18.64)
12		.469 (11.91)	.858 (21.79)
14		.589 (14.96)	.984 (24.99)
16		.717 (18.21)	1.110 (28.19)
18		.779 (19.79)	1.234 (31.34)
20	1.709 (43.41)	.901 (22.89)	1.360 (34.54)
22		1.009 (25.63)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

FIGURE 1. Dimensions for classes E, F, and P - Continued.

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Dimensions for class F



Inches	mm
.430	10.92

Dimensions for class F, bushing removed

FIGURE 1. Dimensions for classes E, F, and P - Continued.

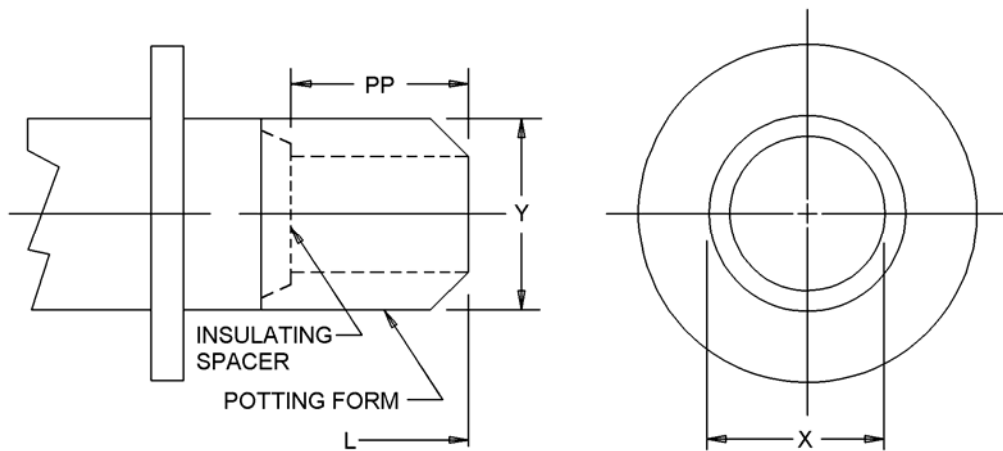
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Size	L max over-all length	X dla min open	Y max	V max closed
8	2.422 (61.52)	.234 (5.94)	.828 (21.03)	.187 (4.75)
10		.297 (7.54)	.891 (22.63)	.187 (4.75)
12		.422 (10.72)	1.016 (25.81)	.281 (7.14)
14		.547 (13.89)	1.141 (28.98)	.325 (8.26)
16	2.537 (64.44)	.609 (15.47)	1.203 (30.56)	.356 (9.04)
18		.734 (18.64)	1.469 (37.31)	.456 (11.58)
20	2.824 (71.73)			
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)

Size	N (g) free dia	ZZ screw threads	YZ lockwashers NASM35338 or NASM35333
8	.125 (3.18)	6-32UNC	NASM35338B6 or -6L NASM35333-105 or NASM35333-37
10	.188 (4.78)		
12	.312 (7.92)		
14	.375 (9.53)		
16	.500 (12.70)		
18	.625 (15.88)	8-32UNC	NASM35338B6L or -6L NASM35333-106 or NASM35333-38
20	.625 (15.88)		
22	.750 (19.05)		
24	.800 (20.32)		

FIGURE 1. Dimensions for classes E, F, and P - Continued.

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Dimensions for class P

Size	L max over-all length	X dia min ID	Y dia max OD	PP min
8	1.656 (42.06)	.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	1.750 (44.45)	1.024 (26.01)	1.360 (34.54)	
22	1.750 (44.45)	1.149 (29.18)	1.484 (37.69)	
24	1.782 (45.26)	1.274 (32.36)	1.610 (40.89)	

FIGURE 1. Dimensions for classes E, F, and P - Continued.

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NOTES:

1. Dimensions are in inches. Metric equivalents are given for general 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 be in accordance with ASTM-D2000.
4. True position (TP) tolerances in accordance with ASME Y14.5M.
5. Material: Shell-aluminum alloy; bayonet pins (B dia) - stainless steel, passivated.

FIGURE 1. Dimensions for classes E, F, and P - Continued.

REQUIREMENTS:

Dimensions and configuration: See figure 1.

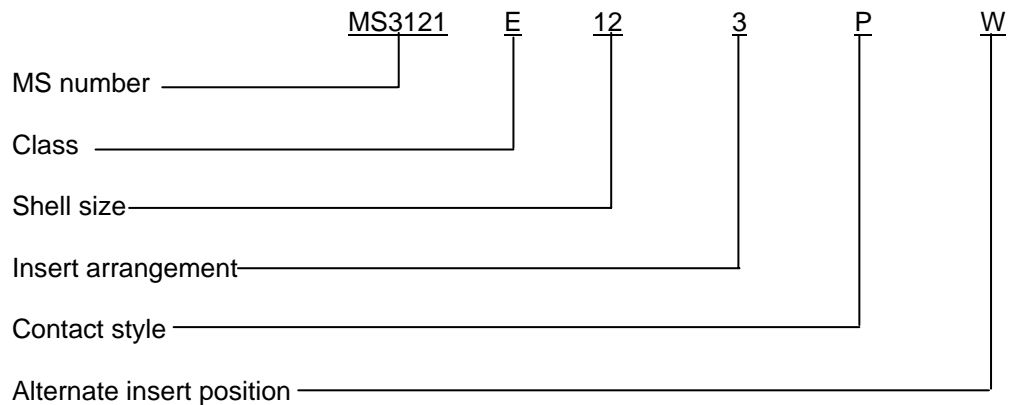
This connector mates with MS3120, MS3122, MS3124, MS3127 and MS3128.

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.

Part or Identifying Number (PIN) example:



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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:

MS3120
MS3122
MS3124
MS3127
MS3128
MIL-STD-1669
SAE-AS39029/31
SAE-AS39029/32
NASM35333
NASM35338
ASME Y14.5M
ASTM-D2000

CONCLUDING MATERIAL

Custodians:

Army - CR
Air Force - 11
DLA - CC

Preparing activity:

DLA - CC

(Project 5935-2007-182)

Review activities:

Army - CR4, MI

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