

INCH-POUND

MS3124F  
 07 November 2007  
 SUPERSEDING  
 MS3124E  
 06 June 2003

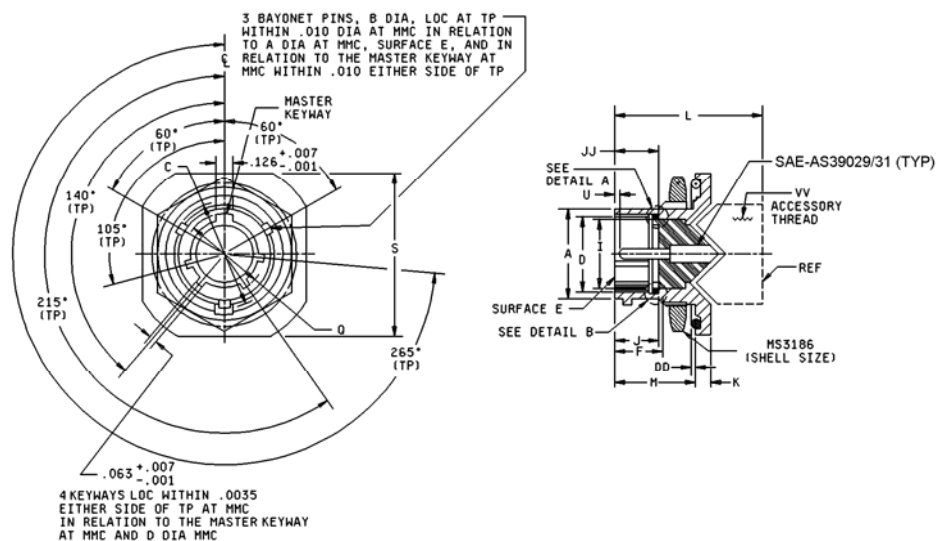
## DETAIL SPECIFICATION SHEET

CONNECTORS, RECEPTACLE, ELECTRIC, CRIMP TYPE,  
 REAR MOUNTING, JAM NUT, 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.

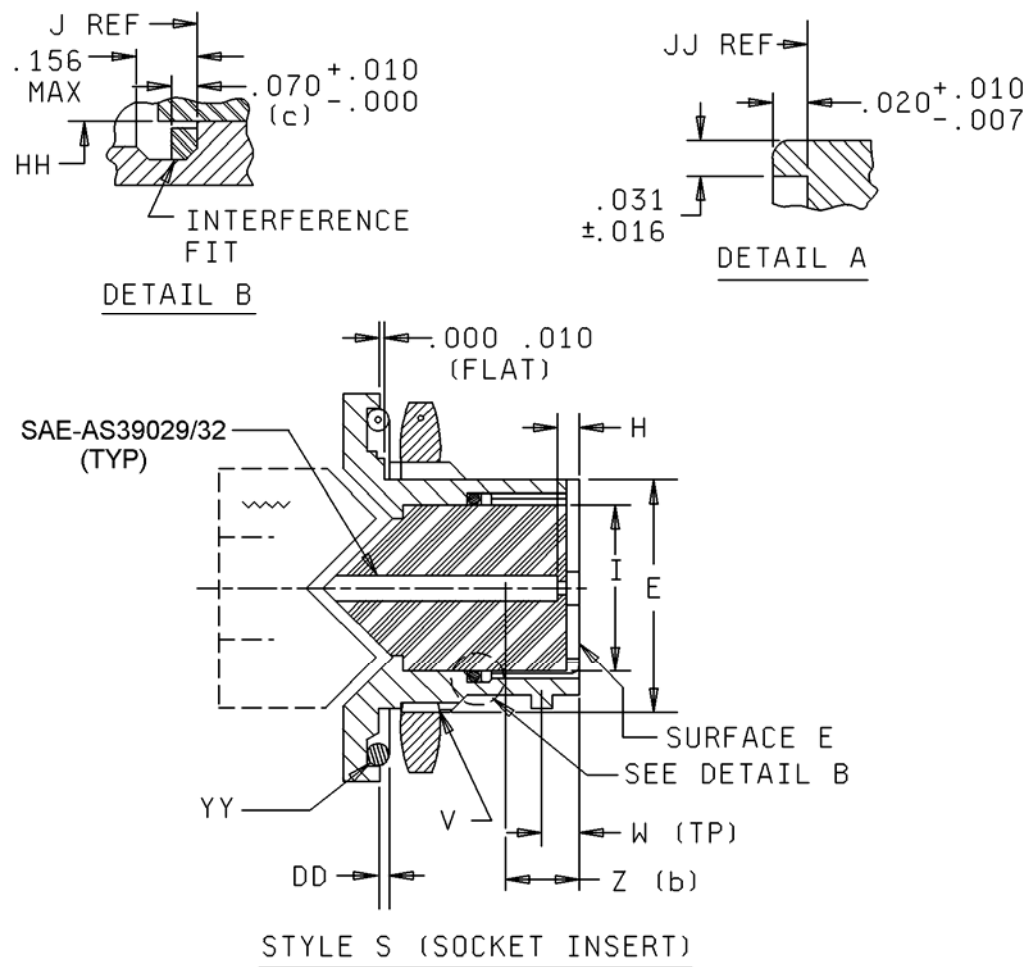


## Style P (pin insert)

Inche	mm
s	
.001	.03
.0035	.09
.007	.18
.010	.25
.063	1.60
.126	3.20

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

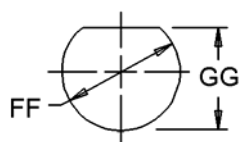
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Inches	mm
.007	.18
.010	.25
.020	.51
.031	.79
.070	1.78
.156	3.96

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

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PANEL MTG  
DIMS REF

Size	DD +.011 o-ring protection	HH max ID gasket	FF +.010 -.005 panel mounting hole	GG +.010 -.005 panel flat location
8	.023 (.58)	.329 (8.36)	.572 (14.53)	.540 (13.72)
10		.457 (11.61)	.697 (17.70)	.665 (16.89)
12		.564 (14.33)	.885 (22.48)	.828 (21.03)
14		.689 (17.50)	1.010 (25.65)	.952 (24.18)
16		.814 (20.68)	1.135 (28.83)	1.076 (27.33)
18		.907 (23.04)	1.260 (32.00)	1.201 (30.51)
20	.028 (.71)	1.032 (26.21)	1.385 (35.18)	1.326 (33.68)
22		1.164 (29.57)	1.510 (38.35)	1.451 (36.86)
24		1.259 (31.98)	1.635 (41.53)	1.576 (40.03)

FIGURE 1. Dimensions 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	E +.000 -.010 mounting flat	F min mounting thread location	G +.000 -.032 across flange corner
8	.473 (12.01)	.078 (1.98)	.563 (14.30)	.362 (9.19)	.530 (13.46)	.384 (9.75)	1.078 (27.38)
10	.590 (14.99)		.680 (17.27)	.490 (12.45)	.655 (16.64)		1.203 (30.56)
12	.750 (19.05)		.859 (21.82)	.607 (15.42)	.818 (20.78)		1.391 (35.33)
14	.875 (22.23)		.984 (24.99)	.732 (18.59)	.942 (23.93)		1.516 (38.51)
16	1.000 (25.40)		1.108 (28.14)	.857 (21.77)	1.066 (27.08)		1.641 (41.68)
18	1.125 (28.58)		1.233 (31.32)	.962 (24.43)	1.191 (30.25)		1.766 (44.86)
20	1.250 (31.75)	.125 (3.18)	1.358 (34.49)	1.087 (27.61)	1.316 (33.43)	.446 (11.33)	1.954 (49.63)
22	1.375 (34.93)		1.483 (37.67)	1.212 (30.78)	1.441 (36.60)		2.078 (52.78)
24	1.500 (38.10)		1.610 (40.89)	1.337 (33.96)	1.566 (39.78)	.479 (12.17)	2.203 (55.96)

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

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Size	H + .000 - .020 socket insert location	I max insert dia	J + .010 packing location	JJ + .000 - .020 pin insert location	K $\pm$ .016 thick mounting flange	M + .031 - .000 mounting flange location
8	.025 (.64)	.285 (7.24)	.382 (9.70)	.332 (8.43)	.117 (2.97)	.691 (17.55)
10		.402 (10.21)				
12		.516 (13.11)				
14		.641 (16.28)				
16		.766 (19.46)				
18		.855 (21.72)				
20	.087 (2.21)	.980 (24.89)	.444 (11.28)	.394 (10.01)	.148 (3.76)	.879 (22.33)
22		1.105 (28.07)				
24		1.229 (31.22)				.912 (23.16)

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

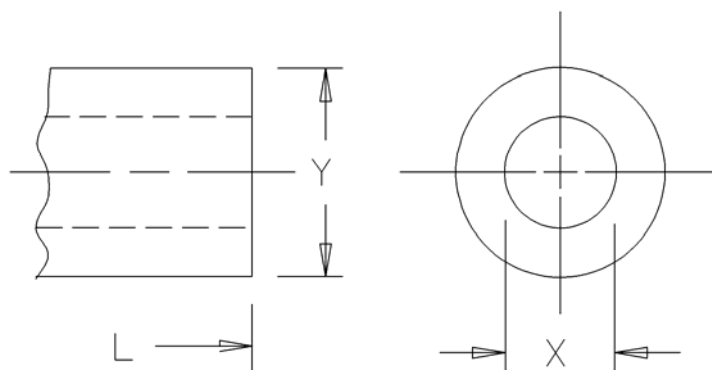
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Size	P panel thickness (Ref)		Q dia +.005 -.006 over keyways	S max length side	U +.010 -.020 pin contact location	V class 2A mounting thread
	min	max				
8	.062 (1.57)	.125 (3.18)	.412 (10.46)	.828 (21.03)	.085 (2.16)	9/16-24
10			.540 (13.72)	.954 (24.23)		11/16-24
12			.689 (17.50)	1.047 (26.59)		7/8-20
14			.814 (20.68)	1.141 (28.98)		1-20
16			.939 (23.85)	1.234 (31.34)		1-1/8-18
18			1.039 (26.39)	1.326 (33.68)		1-1/4-18
20	.250 (6.35)		1.164 (29.57)	1.453 (36.91)	.147 (3.73)	1-3/8-18
22			1.289 (32.74)	1.578 (40.08)		1-1/2-18
24			1.414 (35.92)	1.703 (43.26)		1-5/8-18

Size	W (TP) bay pin location	Z (b) + .000 - .078 socket contact spring location	YY o-ring seal	VV class 2B accessory thread
8	.100 (2.54)	.153 (3.89)	SAE-AS29513-17	5/8-24
10			SAE-AS 29513-19	3/4-20
12			SAE-AS29513-22	7/8-20
14			SAE-AS29513-24	1-20
16			SAE-AS29513-26	1-1/8-18
18			SAE-AS29513-28	1-1/4-18
20	.109 (2.77)	.215 (5.46)	SAE-AS29513-128	1-3/8-18
22			SAE-AS29513-130	1-1/2-18
24			SAE-AS29513-132	1-5/8-18

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

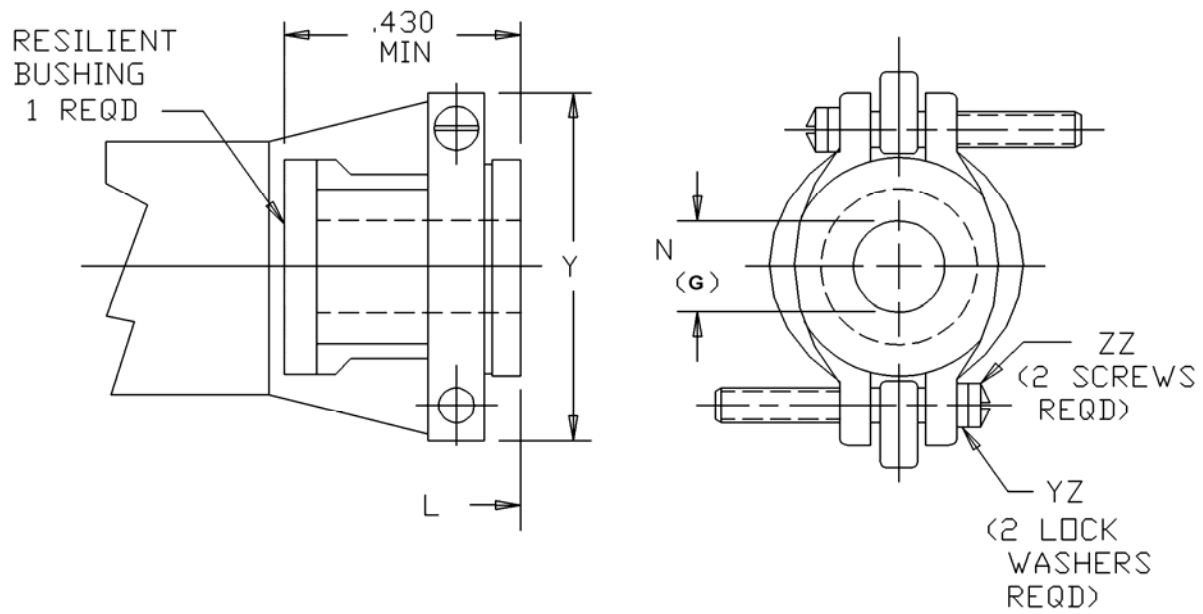
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Dimensions for class E

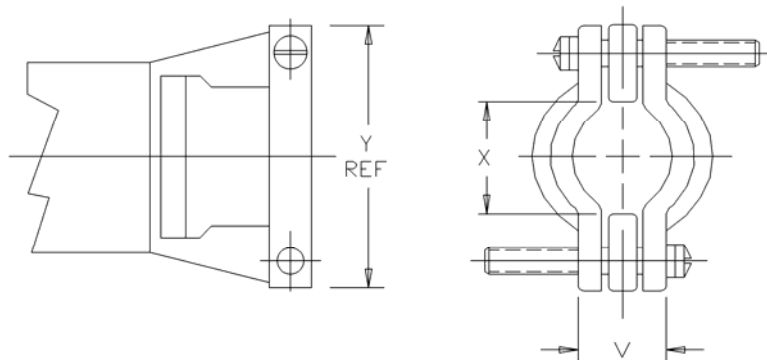
Size	L max over-all length	X dia min ID	Y dia max OD
8	1.552 (39.42)	.259 (6.58)	.750 (19.05)
10		.359 (9.12)	.875 (22.23)
12		.469 (11.91)	1.000 (25.40)
14		.589 (14.96)	1.125 (28.58)
16		.717 (18.21)	1.250 (31.75)
18		.779 (19.79)	1.375 (34.93)
20	1.709 (43.41)	.901 (22.89)	1.531 (38.89)
22		1.009 (25.63)	1.656 (42.06)
24		1.123 (28.52)	1.781 (45.24)

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

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Class F



Inch mm  
.430 10.92

Class F, bushing removed

FIGURE 1. Dimensions for Classes E, F, and P – Continued.



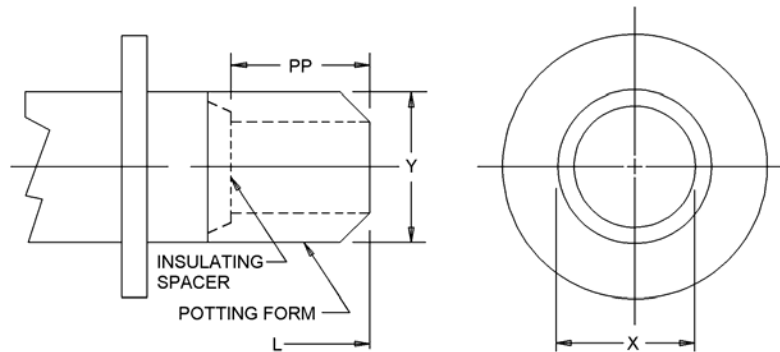
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Size	L max over-all length	X dla min open	Y max	V max closed
8	2.422 (61.52)	.234 (5.94)	.828 (21.03)	.187 (4.75)
10		.297 (7.54)	.891 (22.63)	.187 (4.75)
12		.422 (10.72)	1.016 (25.81)	.281 (7.14)
14		.547 (13.89)	1.141 (28.98)	.325 (8.26)
16	2.537 (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)			.519 (13.18)
22	2.824 (71.73)	.922 (23.42)	1.656 (42.06)	
24		2.900 (73.66)	.984 (24.99)	1.750 (44.45)

Size	N (G) free dia ± .010	ZZ screw threads	YZ lockwashers NASM35338 NASM35333
8	.110 (2.79)	6-32UNC	NASM35338B6L or -6L  NASM35333-105 or NASM35333-37
10	.173 (4.39)		
12	.297 (7.54)		
14	.360 (9.14)		
16	.485 (12.32)		
18	.610 (15.49)	8-32UNC	NASM35338B6L or -6L  NASM35333-106 NASM35333-38
20	.610 (15.49)		
22	.735 (18.67)		
24	.785 (19.94)		

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	Y dia max	PP min
8	1.675 (42.55)	.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	1.963 (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)	

## NOTES:

1. Dimensions 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.
5. Material: shell-aluminum alloy; bayonet pins (B dia) - stainless steel, passivated.

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

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## REQUIREMENTS:

Dimensions and configuration: See figure 1.

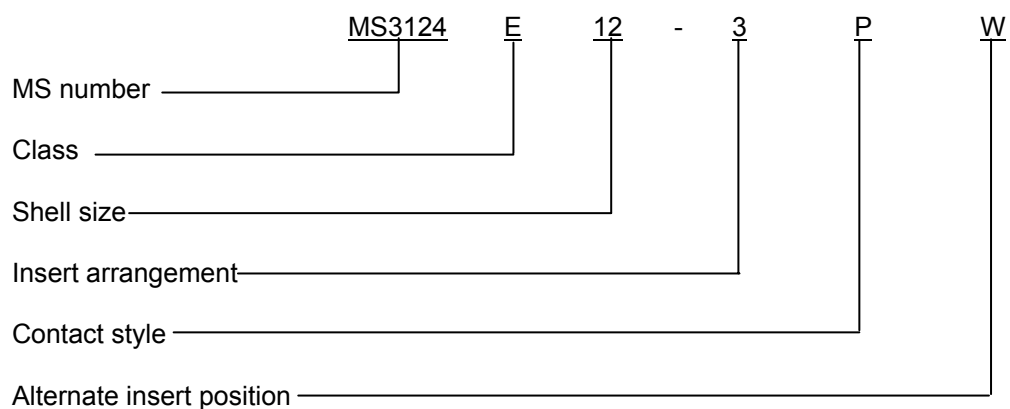
Connector mating: This connector mates with MS3121 and MS3126.

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.

Part or Identifying Number (PIN) example:



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.

## MS3124F

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

MS3121  
MS3126  
MS3186  
SAE-AS39029/31  
SAE-AS39029/32  
MIL-STD-1669  
ASME Y14.5M  
ASTM-D2000  
NASM35338  
NASM35333

## CONCLUDING MATERIAL

### Custodians:

Army - CR  
Air Force - 11  
DLA - CC

### Preparing activity:

DLA - CC

(Project 5935-2007-183)

### Review activities:

Army - AR, 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>.