

INCH-POUND

MS3124E  
6 June 2003  
SUPERSEDING  
MS3124D  
5 September 1975

DETAIL SPECIFICATION SHEET

CONNECTORS, RECEPTACLE, ELECTRICAL, CRIMP TYPE,  
REAR MOUNTING, JAM NUT, BAYONET COUPLING, CLASSES E, F AND P

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-C-26482.

Inactive for new design after 5 September 1975.

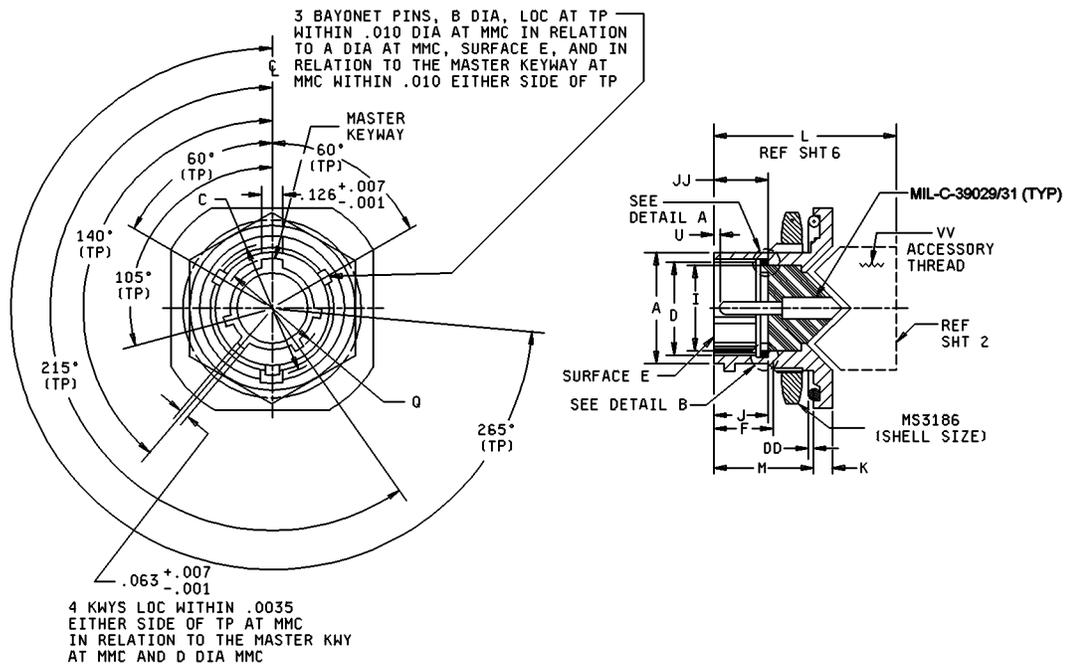


FIGURE 1. Receptacle, style P (pin insert), for classes E, F, and P.

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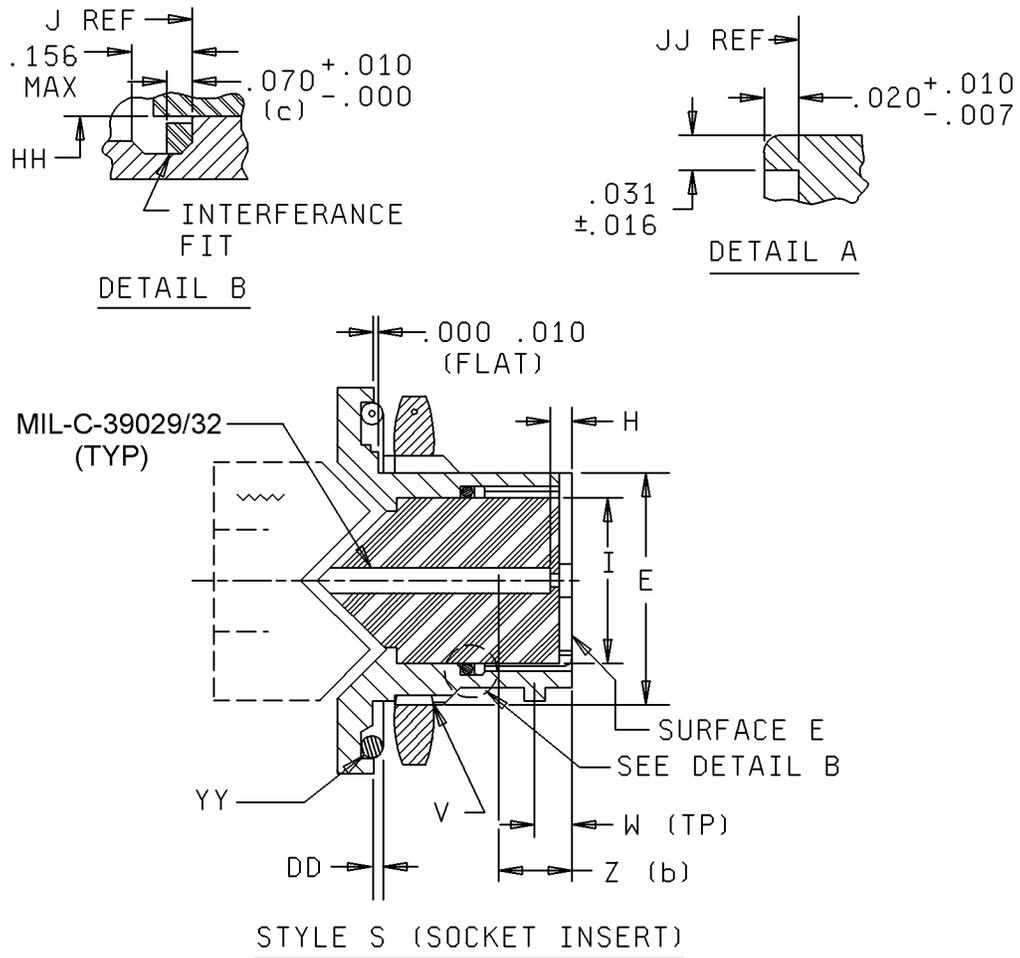
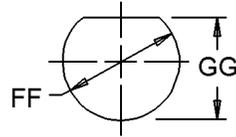


FIGURE 1. Receptacle, style S (socket insert), for classes E, F, and P - Continued.

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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	.329	.572	.540
10		.457	.697	.665
12		.564	.885	.828
14		.689	1.010	.952
16		.814	1.135	1.076
18		.907	1.260	1.201
20	.028	1.032	1.385	1.326
22		1.164	1.510	1.451
24		1.259	1.635	1.576

NOTES:

1. Dimensions in inches.
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 ANSI Y14.5.
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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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	.078	.563	.362	.530	.384	1.078
10	.590		.680	.490	.655		1.203
12	.750		.859	.607	.818		1.391
14	.875		.984	.732	.942		1.516
16	1.000		1.108	.857	1.066		1.641
18	1.125		1.233	.962	1.191		1.766
20	1.250		1.358	1.087	1.316	.446	1.954
22	1.375		1.483	1.212	1.441		2.078.
24	1.500	.125	1.610	1.337	1.566	.479	2.203

Size	H + .000 - .020 socket insert location	I max insert dia	J + .010 packing location	JJ + .000 - .020 pin insert location	K ± .016 thick mounting flange	M + .031 - .000 mounting flange location
8	.025	.285	.382	.332	.117	.691
10		.402				
12		.516				
14		.641				
16		.766				
18		.855				
20	.087	.980	.444	.394	.148	.879
22		1.105				
24		1.229				.912

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

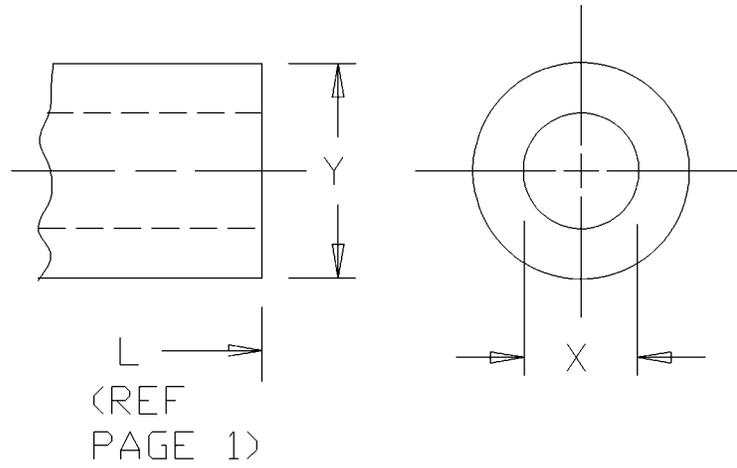
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Size	P panel thickness (Ref)		Q dia +.005 -.006 over keyways	S max length side	U +.010 -.020 pin contact location	V class 2A mounting thread
	min	max				
8	.062	.125	.412	.828	.085	9/16-24
10			.540	.954		11/16-24
12			.689	1.047		7/8-20
14			.814	1.141		1-20
16			.939	1.234		1-1/8-18
18			1.039	1.326		1-1/4-18
20			.250			1.164
22	1.289	1.578			1-1/2-18	
24	1.414	1.703			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	.153	SAE-AS 29513-17	5/8-24
10			SAE-AS 29513-19	3/4-24
12			SAE-AS 29513-22	7/8-20
14			SAE-AS 29513-24	1-20
16			SAE-AS 29513-26	1-1/8-18
18			SAE-AS 29513-28	1-1/4-18
20			.215	
22	SAE-AS 29513-130	1-1/2-18		
24	.109	SAE-AS 29513-132		

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

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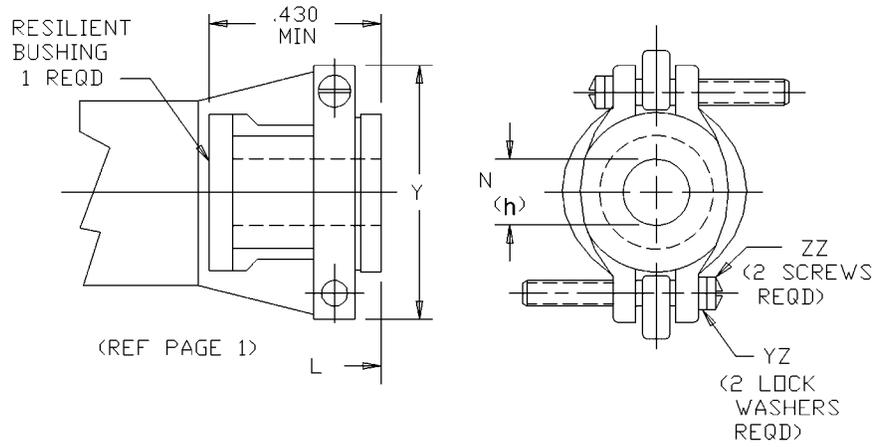


Dimensions for class E

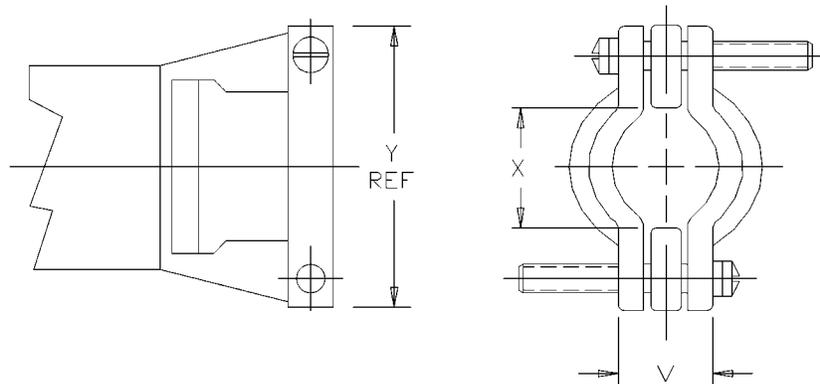
Size	L max over-all length	X dia min id	Y dia max od
8	1.552	.259	.750
10		.359	.875
12		.469	1.000
14		.589	1.125
16		.717	1.250
18		.779	1.375
20	1.709	.901	1.531
22		1.009	1.656
24		1.123	1.781

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

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Dimensions for class F



Dimensions for class F, bushing removed

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

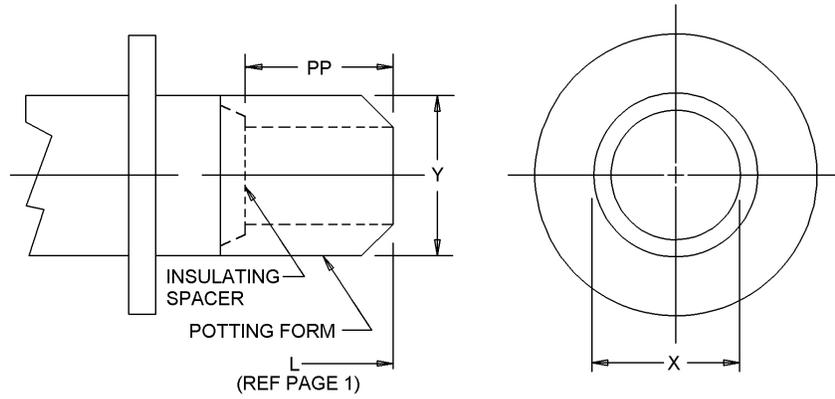
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Size	L max over-all length	X dla min open	Y max	V max closed
8	2.422	.234	.828	.187
10		.297	.891	.187
12		.422	1.016	.281
14		.547	1.141	.325
16	2.537	.609	1.203	.356
18				.456
20		.734	1.469	
22	2.824	.922	1.656	.519
24	2.900	.984	1.750	.657

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

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	.317	.608	.250
10		.434	.734	
12		.548	.858	
14		.673	.984	
16		.798	1.110	
18		.899	1.234	
20	1.963	1.024	1.360	
22	1.963	1.149	1.484	
24	2.025	1.274	1.610	

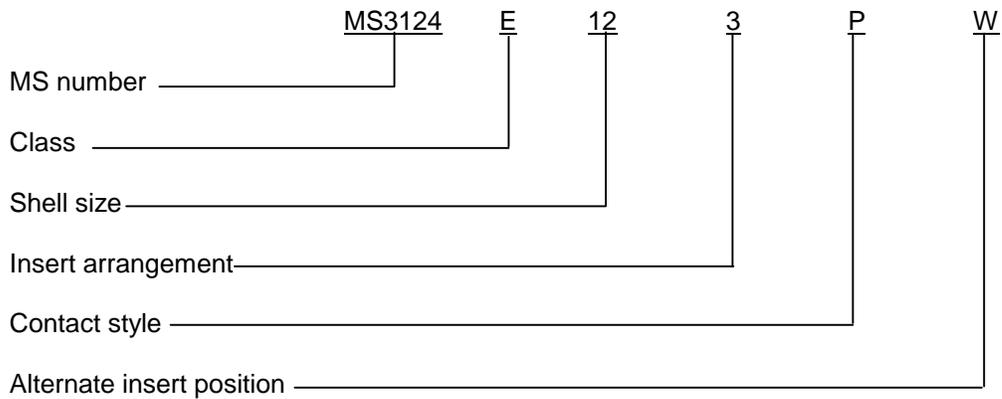
FIGURE 1. Dimensions for classes E, F, and P - Continued.

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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:



CONCLUDING MATERIAL

Custodians:  
Army - CR  
Air Force - 11  
DLA - CC

Preparing activity:  
DLA - CC  
(Project 5935-4419-020)

Review activities:  
Army - AR, MI

## STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

### INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7, and send to preparing activity.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

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I RECOMMEND A CHANGE:	1. DOCUMENT NUMBER <b>MS3124E</b>	2. DOCUMENT DATE (YYYYMMDD) <b>2003/06/06</b>
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3. DOCUMENT TITLE  
**CONNECTORS, RECEPTACLE, ELECTRICAL, CRIMP TYPE, REAR MOUNTING, JAM NUT, BAYONET COUPLING, CLASSES E, F AND P**

4. NATURE OF CHANGE *(Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)*

5. REASON FOR RECOMMENDATION

6. SUBMITTER

a. NAME <i>(Last, First, Middle Initial)</i>	b. ORGANIZATION	
c. ADDRESS <i>(Include zip code)</i>	d. TELEPHONE <i>(Include Area Code)</i> (1) Commercial (2) DSN <i>(if applicable)</i>	7. DATE SUBMITTED <i>(YYYYMMDD)</i>

8. PREPARING ACTIVITY

a. NAME Defense Logistics Agency Defense Supply Center, Columbus	b. TELEPHONE <i>(Include Area Code)</i> (1) Commercial <b>614-692-0565</b> (2) DSN <b>850-0565</b>
c. ADDRESS <i>(Include Zip Code)</i>  DSCC-VAI 3990 E. Broad St. Columbus, Ohio 43213	IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT: Defense Standardization Program Office (DLSC-LM) 8725 John J. Kingman Road, Suite 2533 Fort Belvoir, Virginia 22060-6621 Telephone (703) 767-6888      DSN 427-6888