

INCH-POUND

MS3121C  
 6 June 2003  
 SUPERSEDING  
 MS3121B  
 5 September 1975

## DETAIL SPECIFICATION SHEET

CONNECTORS, PLUG, ELECTRICAL, CRIMP TYPE,  
 CABLE-CONNECTING, 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 as of 5 September 1975.

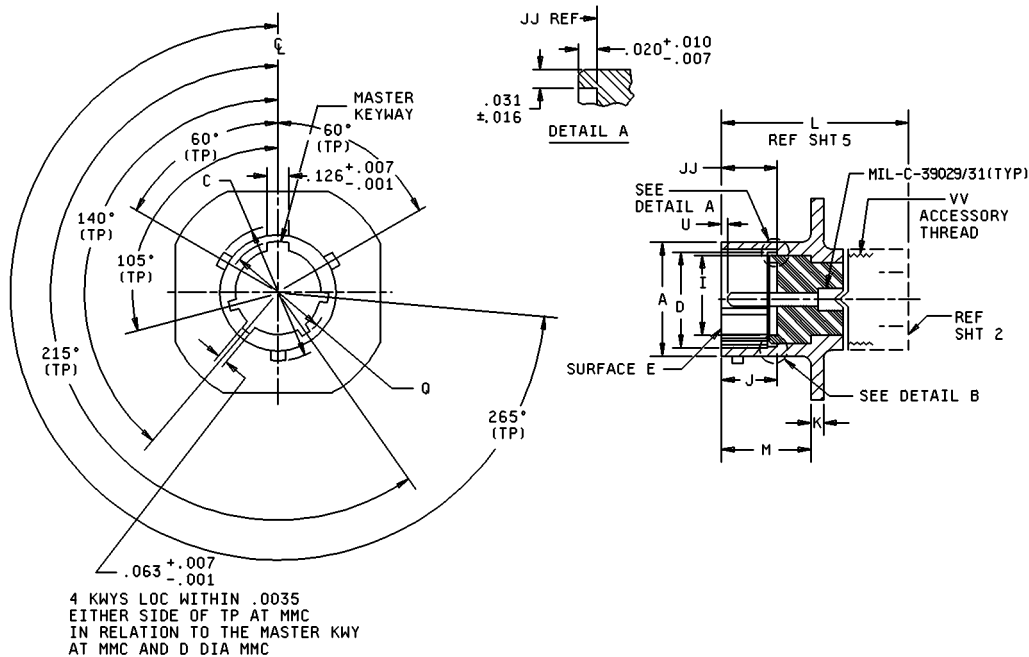
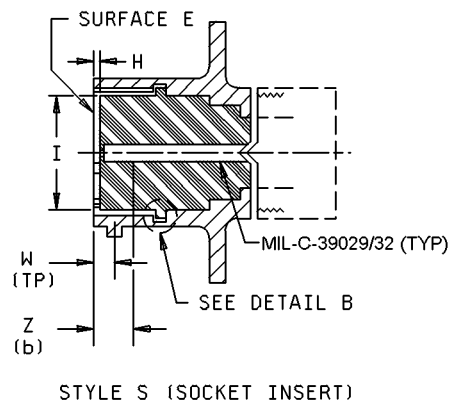
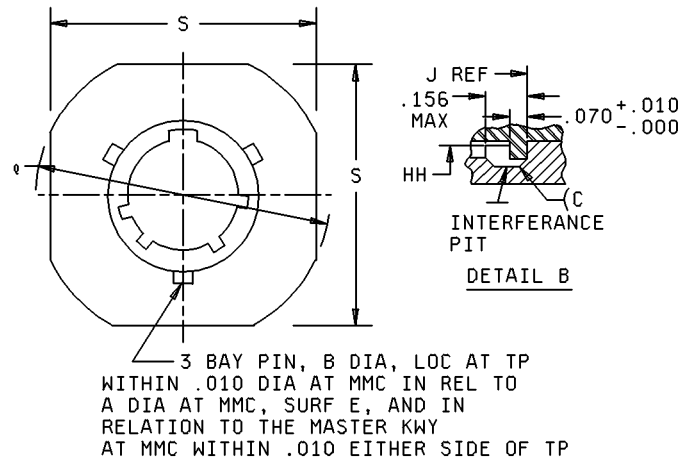


FIGURE 1. Plug, style P (pin insert), for classes E, F, and P.

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## NOTES:

1. Dimensions are 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. Plug, style S (socket insert), 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	.078	.563	.362	.938	.025
10	.590		.680	.490	1.062	
12	.750		.859	.607	1.156	
14	.875		.984	.732	1.250	
16	1.000		1.108	.857	1.344	
18	1.125		1.233	.962	1.438	
20	1.250		1.358	1.087	1.562	
22	1.375	.125	1.483	1.212	1.688	.087
24	1.500		1.610	1.337	1.812	

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	.382	.332	.094	.400
10	.402				
12	.516				
14	.641				
16	.766				
18	.855				
20	.980	.444	.394	.115	.535
22	1.105				.568
24	1.229				

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

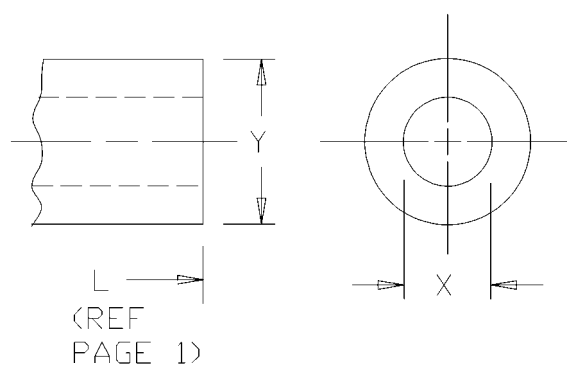
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Size	Q dia +.005 -.006 over keyways	S max length side	HH max id gasket	U +.010 -.020 pin contact location
8	.412	.828	.329	.085
10	.540	.954	.457	
12	.689	1.047	.564	
14	.814	1.141	.689	
16	.939	1.234	.814	
18	1.039	1.326	.907	
20	1.164	1.453	1.039	.147
22	1.289	1.578	1.164	
24	1.414	1.703	1.289	

Size	W (TP) bay pin location	Z (b) +.000 -.078 socket contact spring location	W class 2A accessory thread
8	.100	.153	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	1-3/16-18
22			1-5/16-18
24	.109		1-7/16-18

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

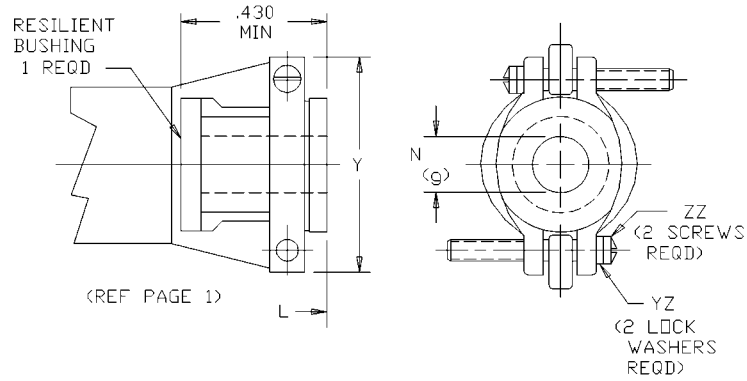
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Dimensions for class E

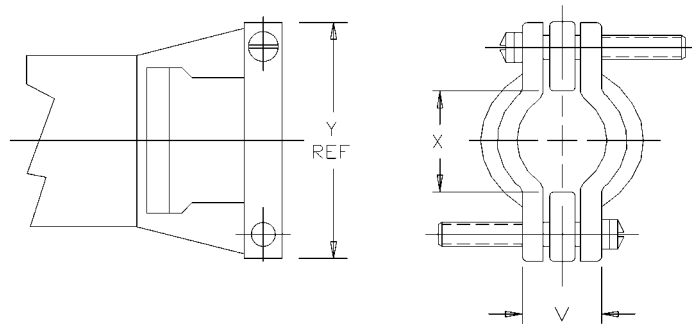
Size	L max over-all length	X dia min id	Y dia max od
8	1.552	.259	.608
10		.359	.734
12		.469	.858
14		.589	.984
16		.717	1.110
18		.779	1.234
20	1.709	.901	1.360
22		1.009	1.484
24		1.123	1.610

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.

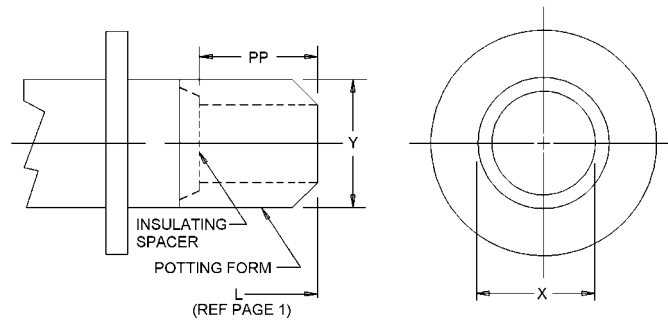
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Size	L max over-all length	X dla min open	Y max	V max closed
8	2.422	.234	.828	.187
10		.297	.891	.187
12		.422	1.016	.281
14		.547	1.141	.325
16	2.537	.609	1.203	.356
18		.734	1.469	.456
20				.519
22	2.824	.922	1.656	
24	2.900	.984	1.750	.657

Size	N (g) free dia	ZZ screw threads	YZ lockwashers NASM35338 OR NASM35333
8	.125	6-32UNC	NASM35338B6L OR -6L  NASM35333-105 OR NASM35333-37
10	.188		
12	.312		
14	.375		
16	.500		
18	.625	8-32UNC	NASM35338B6L OR -6L  NASM35333-106 OR NASM35333-38
20	.625		
22	.750		
24	.800		

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	.317	.608	.250
10		.434	.734	
12		.548	.858	
14		.673	.984	
16		.798	1.110	
18		.899	1.234	
20	1.750	1.024	1.360	
22	1.750	1.149	1.484	
24	1.782	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.

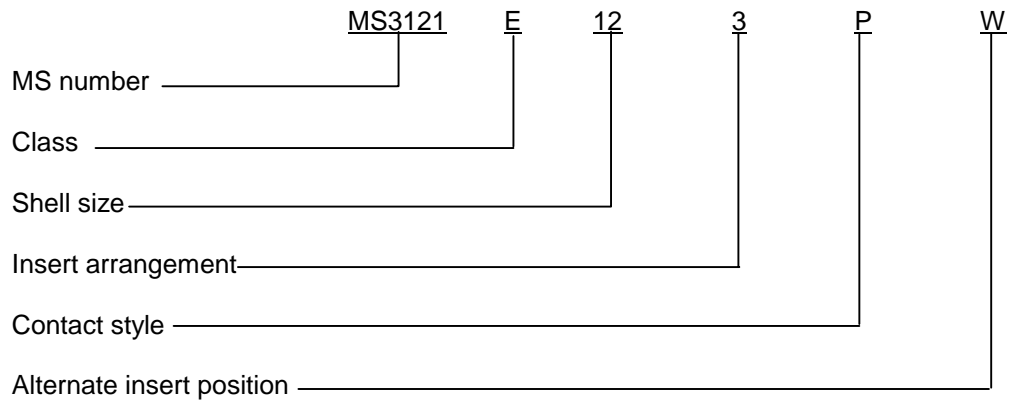
This connector mates with MS3120, MS3122, MS3124, MS3127 and MS3128.

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:



### CONCLUDING MATERIAL

Custodians:

Army - CR

Air Force - 11

DLA - CC

Preparing activity:

DLA - CC

(Project 5935-4419-019)

Review activities:

Army - CR4, MI

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL			
<p align="center"><b>INSTRUCTIONS</b></p> <p>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.</p> <p>2. The submitter of this form must complete blocks 4, 5, 6, and 7, and send to preparing activity.</p> <p>3. The preparing activity must provide a reply within 30 days from receipt of the form.</p> <p>NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.</p>			
I RECOMMEND A CHANGE:		1. DOCUMENT NUMBER <b>MS3121C</b>	2. DOCUMENT DATE (YYYYMMDD) <b>2003/06/06</b>
3. DOCUMENT TITLE <b>CONNECTORS, PLUG, ELECTRICAL, CRIMP TYPE, CABLE-CONNECTING, BAYONET COUPLING, CLASSES E, F AND P</b>			
4. NATURE OF CHANGE <i>(Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)</i>			
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 (YYYYMMDD)
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	