METRIC
MIL-DTL-38999/20F

17 May 2007 SUPERSEDING MIL-DTL-38999/20E 11 June 2001

#### **DETAIL SPECIFICATION SHEET**

CONNECTORS, ELECTRICAL, CIRCULAR, RECEPTACLE, THREADED, WALL MOUNTING FLANGE, REMOVABLE CRIMP CONTACTS, SERIES III, METRIC

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-38999.

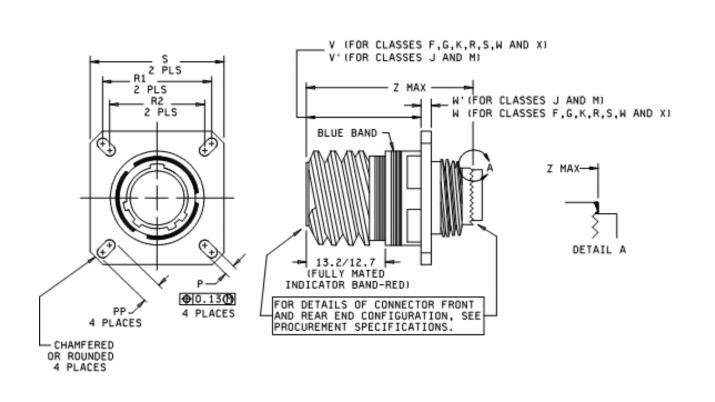


FIGURE 1. Receptacle, classes F, G, J, K, M, R, S, W, and X.

AMSC N/A FSC 5935

Shell	Shell	M (max)	Р	PP	R1	R2	S	
size	size code	Front & rear panel thickness (see note 4)	± 0.20	± 0.20	(see note 2)	(see note 3)	± 0.3	
9	А		3.25 (.128)	5.49 (.216)	18.26	15.09	23.8	
					(.719)	(.594)	(.937)	
11	В	5.80	3.25 (.128)	4.93 (.194)	20.62	18.26	26.2	
					(.812)	(.719)	(1.031)	
13	С	(.228)	3.25 (.128)	4.93 (.194)	23.01	20.62	28.6 (1.126)	
					(.906)	(.812)		
15	D		3.25 (.128)	4.39 (.173)	24.61	23.01	31.0	
					(.969)	(.906)	(1.220)	
17	Е		3.25 (.128)	4.93 (.194)	26.97 (1.062)	24.61	33.3	
						(.969)	(1.311)	
19	F		3.25 (.128)	4.93 (.194)	29.36 (1.156)	26.97	36.5	
						(1.062)	(1.437)	
21	G	5.00	3.25 (.128)	4.93 (.194)	31.75 (1.250)	29.36	39.7	
						(1.156)	(1.563)	
23	Н	(.197)	3.91 (.154)	6.15 (.242)	34.93 (1.375)	31.75	42.9	
						(1.250)	(1.689)	
25	J		3.91 (.154)	6.15 (.242)	38.10 (1.500)	34.93	46.0	
						(1.375)	(1.811)	

FIGURE 1. Receptacle, classes F, G, J, K, M, R, S, W, and X – Continued.

Dimensions							
Shell	Shell size	V	V'	W	W'	Z	
size	code	+ 0.00	+ 1.4			max	
		- 1.25	- 0.0				
9	А	20.83	19.5	2.5/2.1	3.65/2.1	31.5 (1.240)	
11	В	20.83	19.5	2.5/2.1	3.65/2.1	31.5 (1.240)	
13	С	20.83	19.5	2.5/2.1	3.65/2.1	31.5 (1.240)	
15	D	20.83	19.5	2.5/2.1	3.65/2.1	31.5 (1.240)	
17	E	20.83	19.5	2.5/2.1	3.65/2.1	31.5 (1.240)	
19	F	20.83	19.5	2.5/2.1	3.65/2.1	31.5 (1.240)	
21	G	20.07	18.7	3.2/2.1	4.35/2.1	31.5 (1.240)	
23	Н	20.07	18.7	3.2/2.1	4.35/2.1	31.5 (1.240)	
25	J	20.07	18.7	3.2/2.1	4.35/2.1	31.5 (1.240)	

## NOTES:

- 1. Dimensions are in millimeters. Metric equivalent are given for information only.
- 2. Front or rear panel mounting
- 3. Front panel mounting only.
- 4. To insure full mating of the plug or the backshell. It is recommended that the front or rear mounting panel thickness not exceed the M values specified in the table.

FIGURE 1. Receptacle, classes F, G, J, K, M, R, S, W, and X – Continued.

### **REQUIREMENTS:**

Dimensions and configuration: See figure 1. Interface dimensions shall conform to MIL-DTL-38999.

This connector mates with MIL-DTL-38999/26.

For insert arrangements: See MIL-STD-1560.

Connector accessories: See SAE-AS85049.

Part or Identifying Number (PIN) example:

	<u>D38999/</u>	<u>20</u>	<u>W</u>	<u>A</u>	<u>35</u>	<u>P</u>	N
DoD number prefix							
Specification sheet number							
Class							
Shell size code							
Insert arrangement ——							
Contact style							
Polarizing positions  N is required for normal po	sition						

Class F is not for Navy use and is inactive for Air Force new design use.

NOTE: The term PIN is equivalent to the term (part number, identification number, and type designator) which was previously used in this specification.

Qualification required: The activity responsible for the qualified product list for this specification sheet is the Defense Supply Center Columbus, DSCC-VQ, 3990 East Broad Street, Columbus, Ohio 43216-5000.

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-38999, this document references the following:

MIL-DTL-38999/26 MIL-STD-1560 SAE-AS85049

## CONCLUDING MATERIAL

Preparing activity: DLA - CC

(Project 5935-2007-176)

Custodians:

Army – CR

Navy - AS

Air Force – 11

DLA - CC

Review activities:

Army - AR, MI

Navy - EC, MC, OS

Air Force - 19, 99

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