

METRIC

MIL-DTL-38999/24J
31 October 2011
SUPERSEDING
MIL-DTL-38999/24H
10 July 2008

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, CIRCULAR, RECEPTACLE, THREADED,
JAM-NUT MOUNTING, 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.

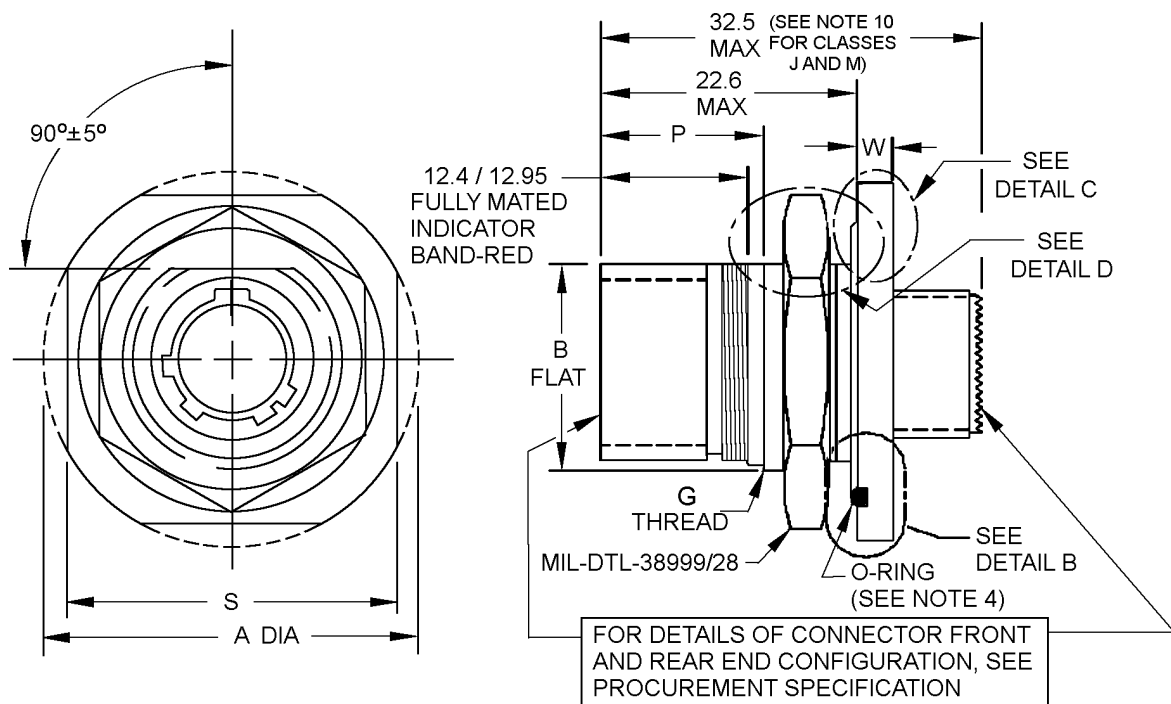


FIGURE 1. Receptacle, classes F, G, J, K, M, P, R, S, T, W, X and Z.

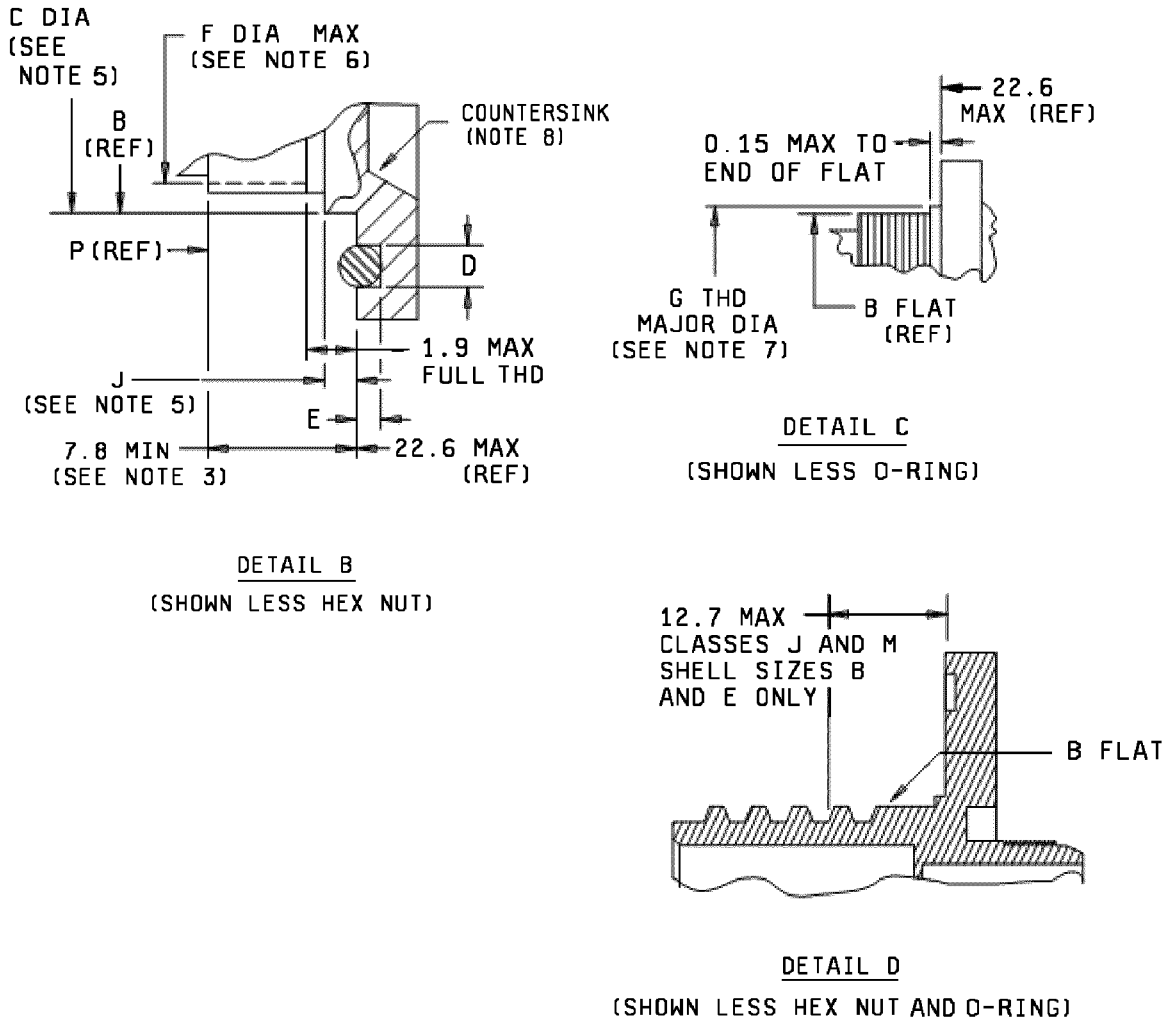


FIGURE 1. Receptacle, classes F, G, J, K, M, P, R, S, T, W, X and Z - Continued.

MIL-DTL-38999/24J

Dimensions							
Shell size	Shell size code	A dia ± 0.3	B flat + 0.10 - 0.15	C dia + 0.1 - 0.2	D + 0.13 - 0.03	E ± 0.13	F dia max
9	A	30.2 (1.189)	16.53 (.651)	17.4 (.685)	2.39 (.094)	1.14 (.045)	15.9 (.626)
11	B	34.9 (1.374)	19.07 (.751)	20.6 (.811)	2.39 (.094)	1.14 (.045)	18.8 (.740)
13	C	38.1 (1.500)	23.82 (.938)	25.4 (1.000)	2.39 (.094)	1.14 (.045)	23.8 (.937)
15	D	41.3 (1.626)	26.97 (1.062)	28.5 (1.122)	2.39 (.094)	1.14 (.045)	26.8 (1.055)
17	E	44.5 (1.752)	30.15 (1.187)	---	2.39 (.094)	1.14 (.045)	30.8 (1.213)
19	F	49.2 (1.937)	33.32 (1.312)	---	3.58 (.141)	1.91 (.075)	33.8 (1.331)
21	G	52.4 (2.063)	36.50 (1.437)	---	3.58 (.141)	1.91 (.075)	36.8 (1.449)
23	H	55.6 (2.189)	39.67 (1.562)	41.2 (1.622)	3.58 (.141)	1.91 (.075)	39.8 (1.567)
25	J	58.7 (2.311)	42.85 (1.687)	44.4 (1.748)	3.58 (.141)	1.91 (.075)	42.8 (1.685)

FIGURE 1. Receptacle, classes F, G, J, K, M, P, R, S, T, W, X and Z - Continued.

MIL-DTL-38999/24J

Dimensions								
Shell size	Shell size code	G Thread	J + 0.0 - 0.71	P + 0.6 - 0.0	S ± 0.4	W + 0.9 - 0.1	Recommended O-ring SAE-AS3582 (see note 4)	External bending moment Classes J and M (Newton-Meters)
9	A	M17x1-6g 0.100R	1.5 (.059)	14.1 (.555)	27.0 (1.063)	2.2 (.087)	-019	8.5
11	B	M20x1-6g 0.100R	1.5 (.059)	14.1 (.555)	31.8 (1.252)	2.2 (.087)	-022	14.1
13	C	M25x1-6g 0.100R	1.5 (.059)	14.1 (.555)	34.9 (1.374)	2.2 (.087)	-024	19.8
15	D	M28x1-6g 0.100R	1.5 (.059)	14.1 (.555)	38.1 (1.500)	2.2 (.087)	-026	28.2
17	E	M32x1-6g 0.100R (see note 2)	---	14.1 (.555)	41.3 (1.626)	2.2 (.087)	-028	36.7
19	F	M35x1-6g 0.100R	---	14.1 (.555)	46.0 (1.811)	3.0 (.118)	-128	45.2
21	G	M38x1-6g 0.100R	---	14.1 (.555)	49.2 (1.937)	3.0 (.118)	-130	53.7
23	H	M41x1-6g 0.100R	1.5 (.059)	14.1 (.555)	52.4 (2.063)	3.0 (.118)	-132	62.1
25	J	M44x1-6g 0.100R	1.5 (.059)	14.1 (.555)	55.6 (2.189)	3.0 (.118)	-134	73.4

NOTES:

1. Dimensions are in millimeters. Inch equivalents are given for information only.
2. Modified major diameter: 31.95 - 31.80.
3. Panel thickness: 3.2 - 1.58.
4. Alternate O-ring material may be SAE-AMS3325 (fluorosilicone O-ring). Fluorosilicone materials have greater hydrocarbon fluid resistance than silicone materials and should be considered for applications where resistance to hydrocarbon fluids is critical.
5. C and J dimensions define feature required for proper fit in type E panel.
6. F diameter defines thread start.
7. This dimension applies to sizes 17, 19, and 21 only (C and G diameters are the same).
8. Countersink may be incorporated to accept accessory configuration in accordance with MIL-DTL-38999.
9. Classes J and M should not be used when critical connector to panel bonding (below 10 millivolts) is required.
10. For classes J and M only, overall shell length is increased to 33.0 mm (1.300 in) max.

FIGURE 1. Receptacle, classes F, G, J, K, M, P, R, S, T, W, X and Z - Continued.

MIL-DTL-38999/24J

REQUIREMENTS:

Dimensions and configuration: See figure 1. Interface dimensions shall be in accordance with MIL-DTL-38999.

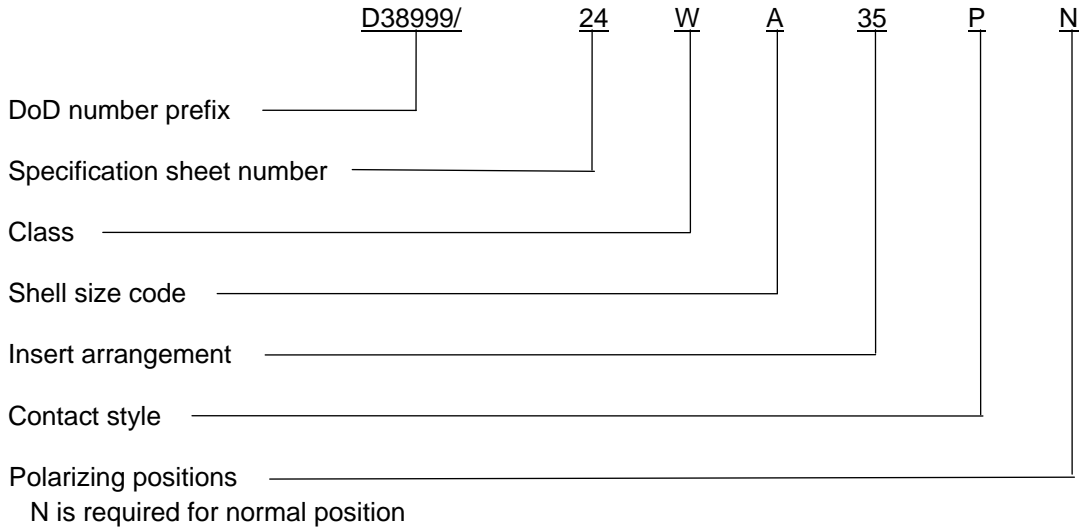
This connector mates with MIL-DTL-38999/26.

O-ring and MIL-DTL-38999/28 nut shall be provided with jam-nut receptacle.

For insert arrangements: See MIL-STD-1560.

Connector accessories: See SAE-AS85049.

Part or Identifying Number (PIN) example:



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 products list for this specification sheet is DLA Land and Maritime-VQ, P.O. Box 3990, Columbus, Ohio 43218-3990.

Changes from previous issue. The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

MIL-DTL-38999/24J

Referenced documents. In addition to MIL-DTL-38999, this document references the following:

MIL-STD-1560
MIL-DTL-38999/26
MIL-DTL-38999/28
SAE-AMS3325
SAE-AS85049
SAE-AS3582

CONCLUDING MATERIAL

Custodians:

Army - CR
Navy - AS
Air Force - 85
DLA - CC

Preparing activity:

DLA - CC

(Project 5935-2011-113)

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 the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.daps.dla.mil>.