

METRIC

MIL-DTL-38999/34B  
11 June 2001  
SUPERSEDING  
MIL-C-38999/34A(USAF)  
15 November 1994

DETAIL SPECIFICATION SHEET

CONNECTORS, RECEPTACLE, ELECTRICAL, CIRCULAR, BREAKAWAY  
JAMNUT MOUNTING, REMOVABLE CRIMP CONTACTS, SOCKETS,  
SERIES III, SHELL SIZE 25, 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 and MIL-DTL-38999.

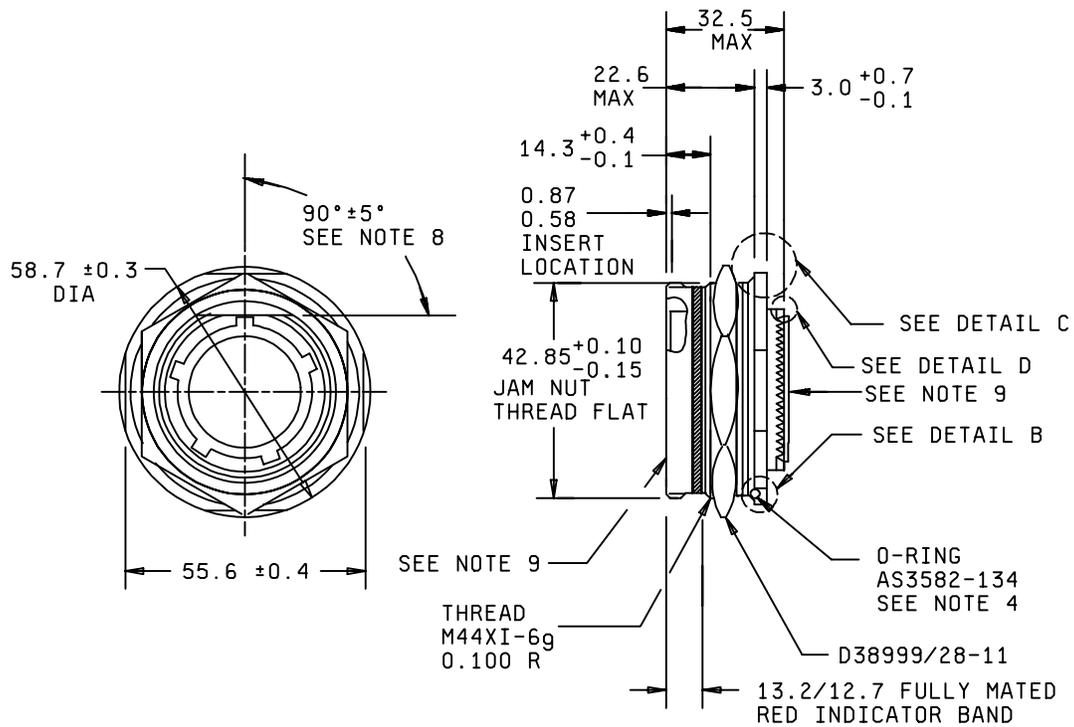


FIGURE 1. Receptacle, classes J, M, R, W and X.

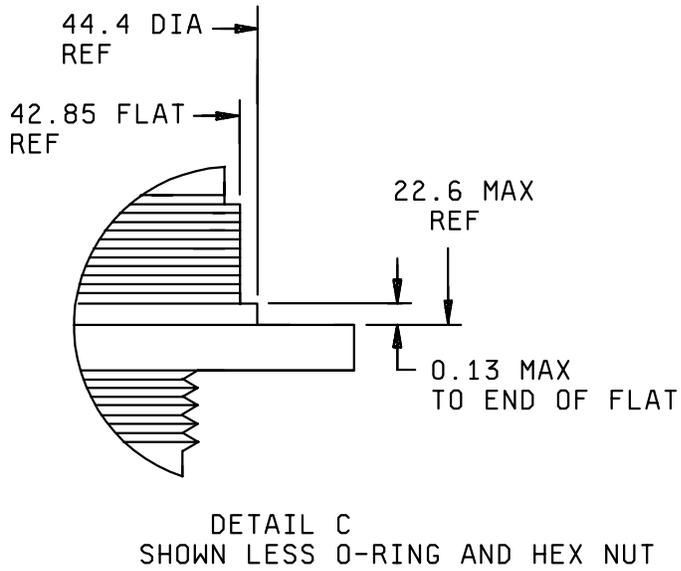
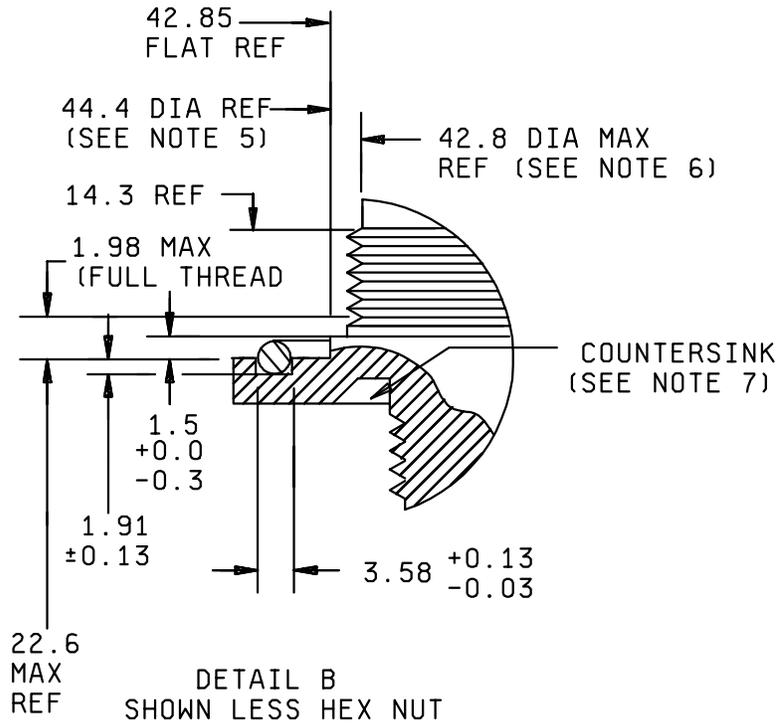
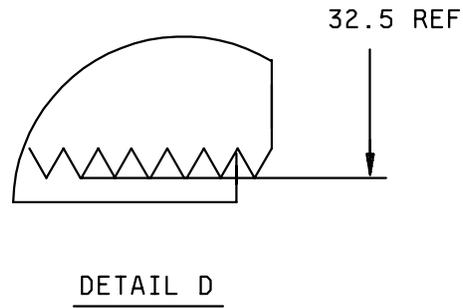


FIGURE 1. Receptacle, classes J, M, R, W and X – Continued.



NOTES:

1. Dimensions are in millimeters.
2. Panel thickness: 3.2 - 1.58 mm.
3. Alternates O-ring material may be AMS 3325.
4. C and J dimensions define feature required for proper fit in type E panel.
5. F diameter and P dimensions defines G thread start.
6. Countersink may be incorporated to accept accessory configuration in accordance with MIL-DTL-38999.
7. B flat orientation.
8. For details of connector front and rear configurations see MIL-DTL-38999.

FIGURE 1. Receptacle, classes J, M, R, W and X – Continued.

REQUIREMENTS:

Dimensions and configuration: See figure 1.

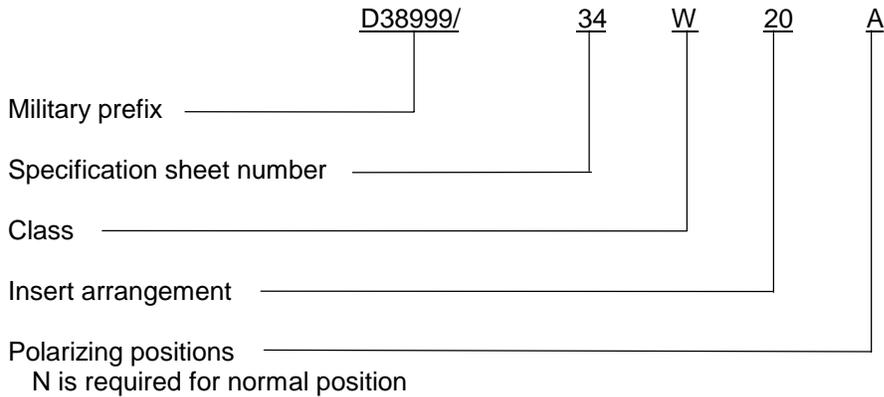
Interface dimensions shall conform to MIL-DTL-38999.

This receptacle is designed for use with lanyard release plug and mates with MIL-DTL-38999/29, /30, and /31. It is intended to be used only on stores.

Insert arrangement: See MIL-STD-1560.

Separation force: The receptacle shell shall break into two parts when a separation force is applied at any angle within 15° of the normal axis by the mating plug assembly. Separation shall occur such that the plug assembly shall be pulled free of the receptacle insert and contacts shall remain secure in the mounted part.

Part or Identifying Number (PIN) example:



QUALIFICATION:

Qualification is not required. First article inspection shall be applied on each and every contract. The first article inspection shall not be waived even for manufacturers who have previously received a first article inspection contract. Contracts with renewal options shall impose first article test requirements at each renewal. The bidder awarded the contract shall incur the cost of first article test.

The first article test requirements are as specified in MIL-DTL-38999, with the following exceptions.

Group I:

Durability: Wired connectors shall meet the durability requirements of MIL-DTL-38999, with the following exceptions:

The total number of cycles of mating and unmating shall be 500, in the following sequences: 200 cycles of normal mating and unmating, 50 cycles of normal mating with pull-separation unmating, 200 cycles of normal mating and unmating, 50 cycles of normal mating with pull-separation unmating. The lanyard release velocity during the pull-separation force unmating cycles shall be 9.15 meters per second.

Separation force: Upon conclusion of the group I test, all samples shall be subjected to an axial force applied by a mated plug assembly. The connector shall meet the requirements of separation force when the applied load is 1,800 ±200 Newton.

External bending moment: Wired connectors shall meet external bending moment requirements of MIL-DTL-38999 with the following exception: Size 25 loading shall be 28.3 Newton-meters.

Group II:

Durability: Wired connectors shall meet the durability requirements of MIL-DTL-38999, with the following exceptions:

The total number of cycles of mating and unmating shall be 500, in the following sequences: 200 cycles of normal mating and unmating, 50 cycles of normal mating with pull-separation unmating, 200 cycles of normal mating and unmating, 50 cycles of normal mating with pull-separation unmating. The lanyard release velocity during the pull-separation force unmating cycles shall be 9.15 meters per second.

Vibration: Wired connectors shall meet the vibration requirements of MIL-DTL-38999 with the following exceptions:

Sine vibration: Connectors shall be subjected to the test specified in method 204, test condition G, of MIL-STD-202.

Random vibration: Connectors shall be subjected to the test specified in method 2005 of MIL-STD-1344, test condition VI, letter J, ambient temperature. Duration shall be 8 hours in the longitudinal direction and 8 hours in a perpendicular direction, for a total of 16 hours.

The qualifying activity will define the accessory load and cable to be used in the random and sine vibration tests.

Separation force: Upon conclusion of the group II test, all samples shall be subjected to an axial force applied by a mated plug assembly. The connector shall meet the requirements of separation force when the applied load is 1,800 ±200 Newton.

External bending moment: Wired connectors shall meet external bending moment requirements of MIL-DTL-38999 with the following exception: Size 25 loading shall be 28.3 Newton-meters.

CONCLUDING MATERIAL

Custodians:  
Air Force – 11  
DLA - CC

Preparing activity:  
DLA - CC

(Project 5935-4301-15)

Review activities:  
Air Force - 19, 99