

METRIC

MIL-DTL-38999/35D

10 July 2008

SUPERSEDING

MIL-DTL-38999/35C

1 September 2006

DETAIL SPECIFICATION SHEET

CONNECTORS, RECEPTACLE, ELECTRICAL, CIRCULAR, BREAKAWAY,
WALL MOUNTING FLANGE, 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 sheet and MIL-DTL-38999.

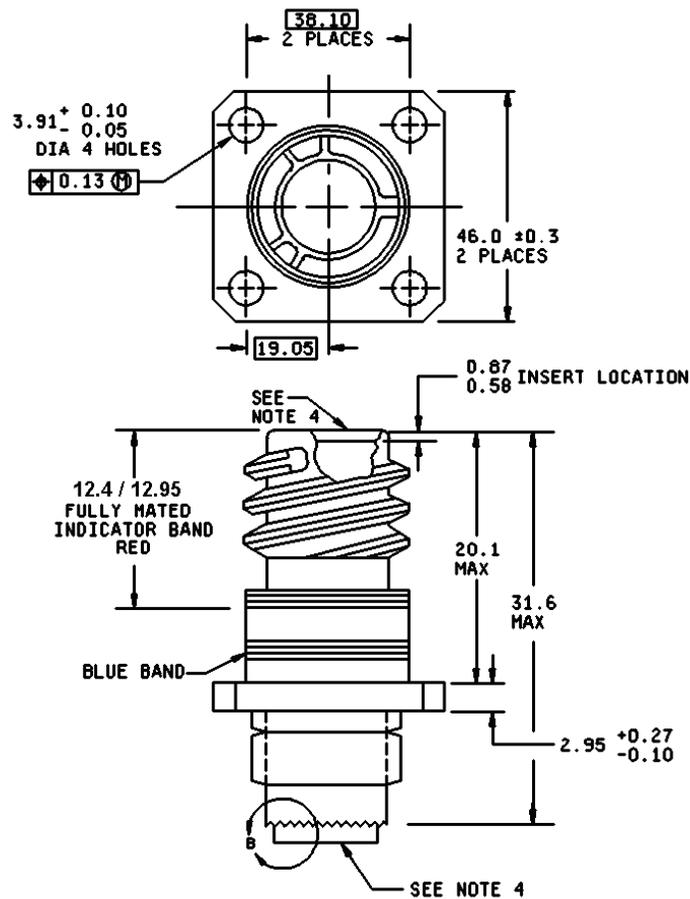
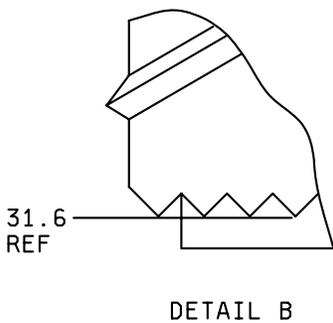


FIGURE 1. Receptacle, classes J, M,P, R, T ,W ,X and Z.



mm	Inches	mm	Inches	mm	Inches
.05	.002	.87	.034	20.1	.79
.10	.004	2.95	.116	31.6	1.24
.13	.0039	3.91	.154	38.10	1.42
.27	.011	12.7	.5	46.0	1.81
.3	.012	13.2	.52		
.58	.023	19.05	.75		

NOTES:

1. Dimensions are in millimeters.
2. Inch equivalents are given for information only.
3. Front or rear panel mounting.
4. For details of connector front and rear configurations, see MIL-DTL-38999.

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

REQUIREMENTS:

Dimensions and configurations: 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.

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Part or Identifying Number (PIN) example:



QUALIFICATION:

Qualification is required. Qualifications shall be in accordance with 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 newtons.

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.

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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 test procedure EIA-364-28, 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 $1,800 \pm 200$ 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.

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-38999/29
MIL-DTL-38999/30
MIL-DTL-38999/31
MIL-STD-202
MIL-STD-1560
EIA-364-28

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CONCLUDING MATERIAL

Custodians:
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

(Project 5935-2008-024)

Review activities:
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 <http://assist.daps.dla.mil>.