

INCH-POUND

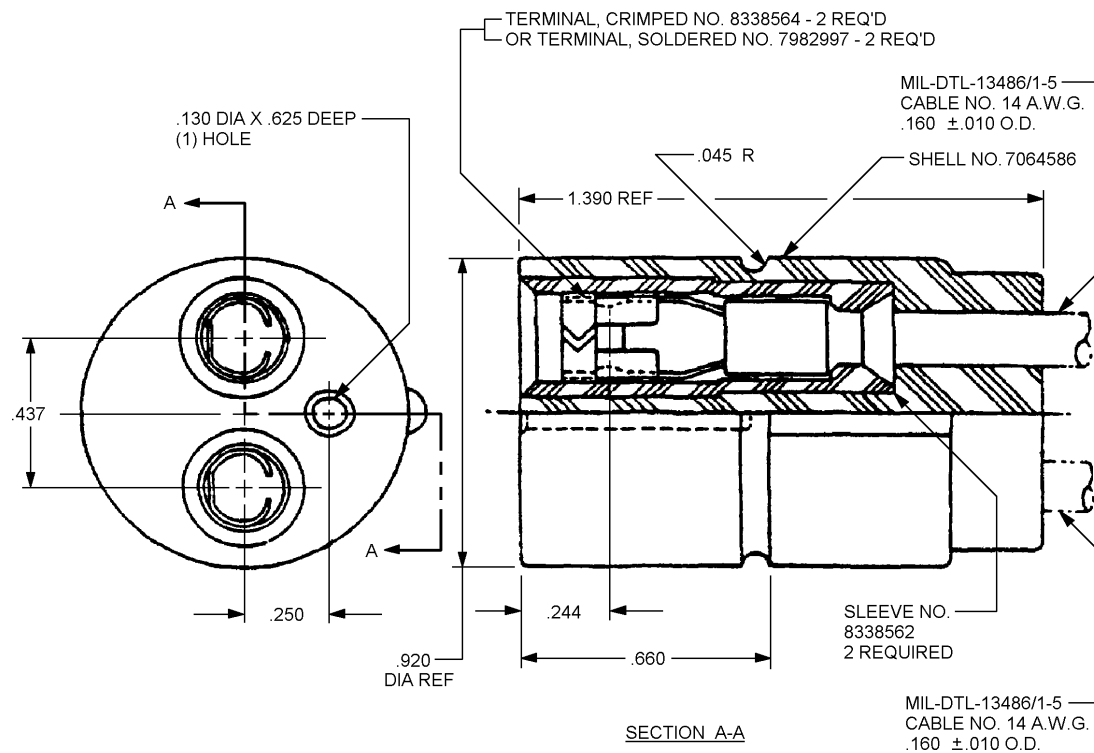
MS27145C  
 17 June 2003  
 SUPERSEDING  
 MS27145B  
 16 February 1988

## DETAIL SPECIFICATION SHEET

CONNECTOR, PLUG, ELECTRICAL, NO. 14 AWG,  
 DOUBLE CONTACT, WATERPROOF

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.



Inches	mm	Inches	mm
.010	.25	.437	11.10
.045	1.14	.625	15.87
.130	3.30	.660	16.76
.160	4.00	.92	12.55
.244	6.20	.690	23.37
.250	6.35	1.390	35.3

FIGURE 1. Configuration and dimensions.

## MS27145C

### REQUIREMENTS:

#### Material:

Shell: Rubber in accordance with ASTM D2000, M3BC610A14C12EO34F19.

Terminal: Brass composition, temper half hard minimum in accordance with ASTM B 36/B 36M, ASTM B121/B 121M or ASTM B124/B 124M.

Terminal protective finish: Silver plate, grade D, class S, .0002-inch minimum thickness in accordance with ASTM B700.

Mating connectors: See MS27146.

When connectors are coupled, the following requirements shall apply:

Voltage drop: The voltage drop shall not exceed 20 millivolts when tested in a 28 volt circuit as outlined in MIL-STD-202, method 307.

Dielectric strength: The assembly shall withstand dielectric strength test of 1000 volts and meet the requirements of MIL-STD-202, method 302.

Waterproof requirements: The assembly shall be waterproof. Refer to MIL-HDBK-1184, or equivalent, for guidance on waterproof testing.

Salt spray corrosion test: The assembly shall meet the requirements of salt spray corrosion test outlined in MIL-STD-202, method 101 (5% saline solution, 200 hours duration).

Pull test: Terminal number 8338564 to be crimped to cable. Terminal number 7982997 to be soldered to cable with solder composition SN-50 or SN-60, in accordance with J-STD-004, J-STD-005, and J-STD-006. The terminal assembly shall withstand a pull test of 60 pounds (27 kilograms).

Separation force: The force required to uncouple the connectors shall not exceed 50 percent of the values expressed in the pull test above when tested at -55°C and at 85°C.

Part or Identifying Number (PIN): MS27145-1.

Details of this assembly shall be in accordance with engineering parts list 8589045, which may be obtained from the U.S. Army Tank Automotive Command, Warren, MI 48397-5000.

(Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.)

### CONCLUDING MATERIAL

#### Custodians:

Army – AT  
Navy – YD  
DLA – CC

#### Preparing activity:

DLA - CC

(Project 5935-4427-004)

#### Review activities:

Army – CR4, MI  
Navy – MC