INCH-POUNDS

MIL-DTL-28754/34E
14 May 2015
SUPERSEDING
MIL-C-28754/34D
23 March 1994

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, MODULAR, CONNECTOR, TYPE III, FEMALE CONTACT AND INSTULATOR BUSHING SET, REMOVABLE WIRE WRAPPOST TERMINAL

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-C-28754.

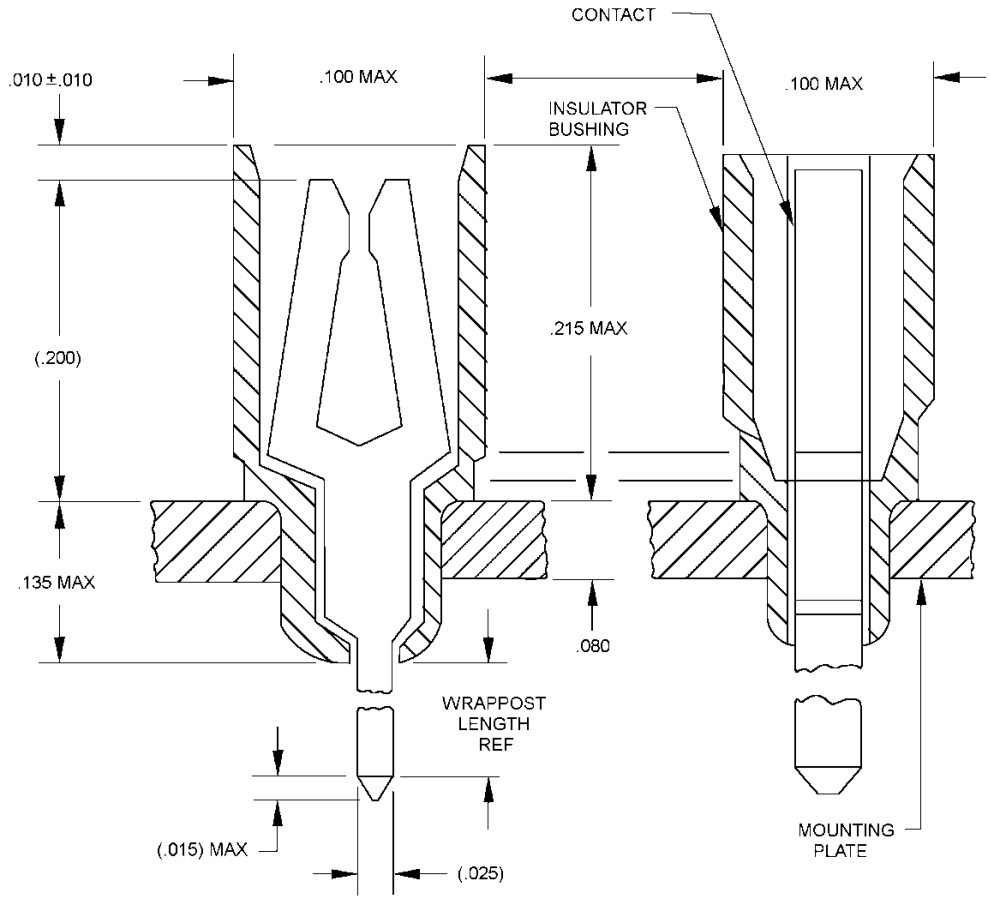


FIGURE 1. Typical female contact, insulator bushing and mounting plate assembly.

Inches	mm	Inches	mm	Inches	mm
.005	.13	.025	.64	.200	5.08
.010	.25	.080	2.03	.215	5.46
.01	.3	.100	2.54		
.015	.38	.135	3.43		

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only and are based upon 1.00 inch = 25.4 mm.
3. Unless otherwise specified, tolerances are ± .005 inch (.13 mm) on three place decimals, ± .01 inch (.3 mm) on two place decimals and ± 2° on angles.

FIGURE 1. Typical female contact, insulator bushing and mounting plate assembly – Continued.

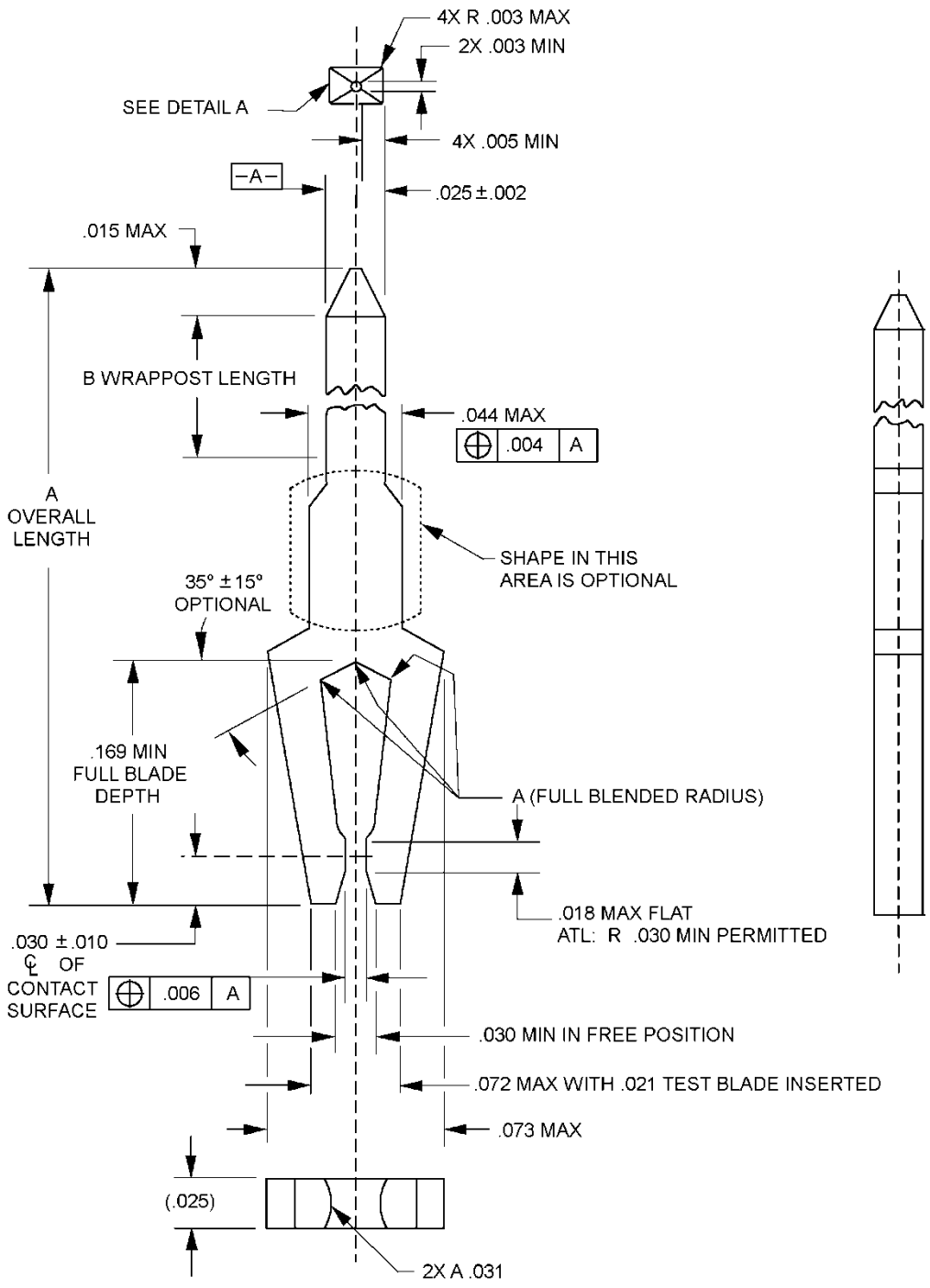
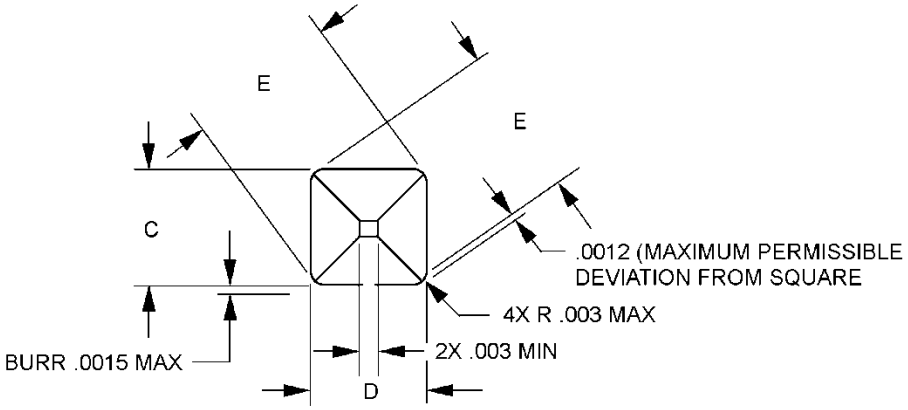


FIGURE 2. Contact, female, wrappost.



DETAIL A

Wrappost Geometry				
C	D	E	Parallelism	Straightness
.025 (Nom) .022 (Min)	.025 (Nom) .022 (Min)	.0355 (Max) .0325 (Min)	.002	.005 in/in

Inches	mm	Inches	mm	Inches	mm	Inches	mm
.002	.05	.010	.25	.025	.64	.073	1.85
.003	.08	.01	.3	.030	.76	.164	4.17
.004	.10	.015	.38	.031	.79		
.005	.13	.018	.46	.044	1.12		
.006	.15	.021	.53	.072	1.83		

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only and are based upon 1.00 inch = 25.4 mm.
3. See table I for dimensions A and B.
4. Unless otherwise specified, tolerances are ± .005 inch (.13 mm) on three place decimals, ± .01 inch (.3 mm) on two place decimals and ± 2° on angles.

FIGURE 2. Contact, female, wrappost – Continued.

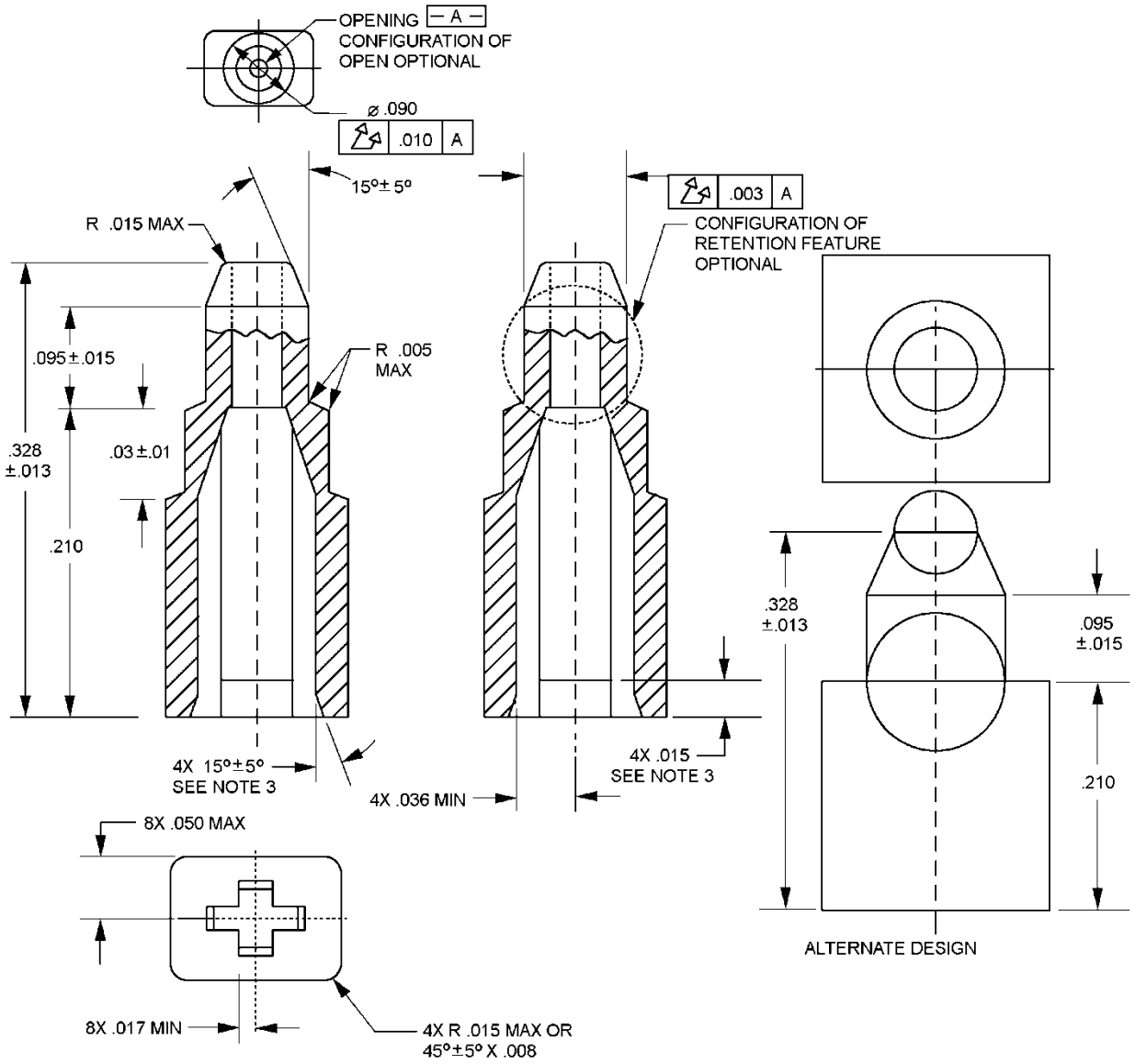


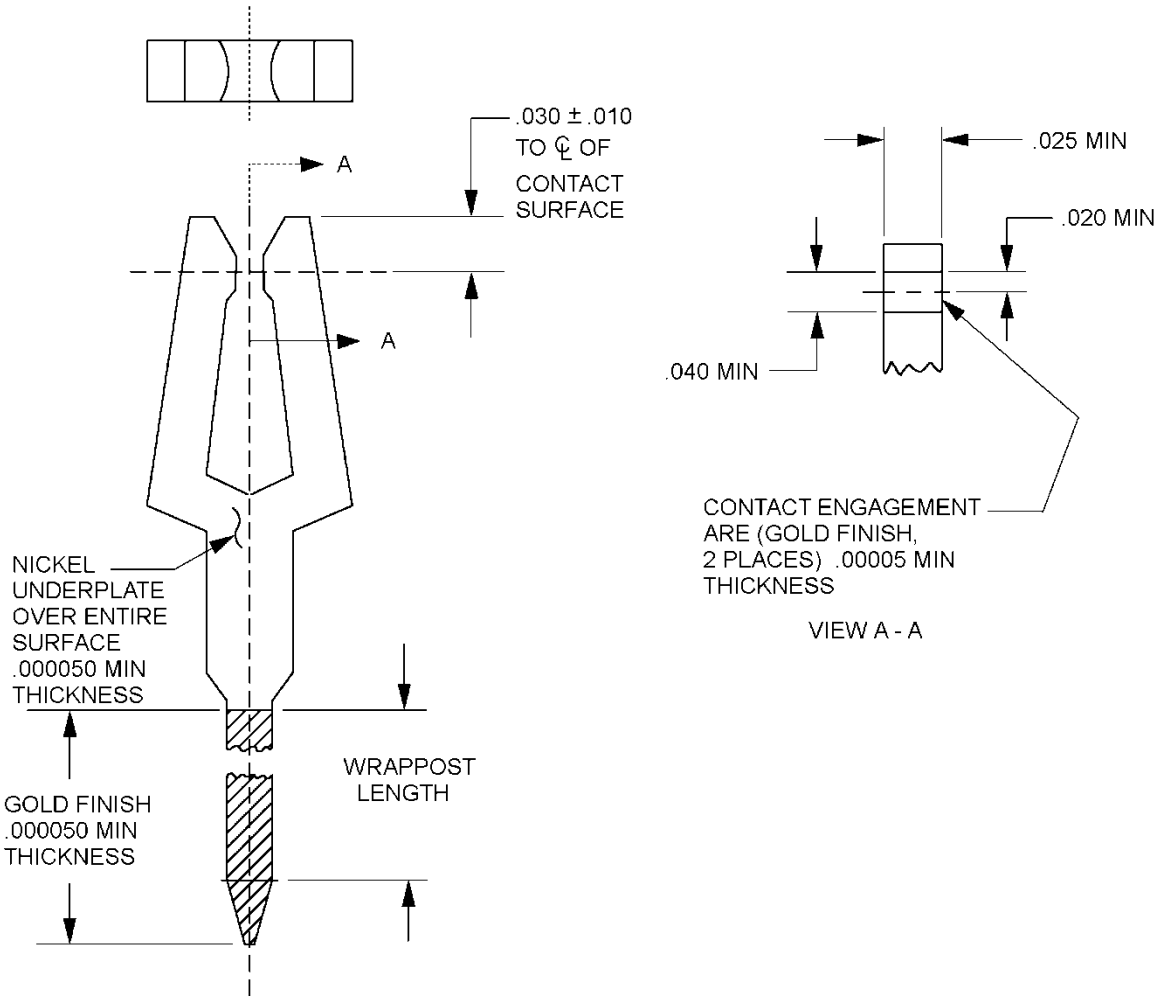
FIGURE 3. Bushing, insulator, female.

Inches	mm	Inches	mm	Inches	mm	Inches	mm
.003	.08	.01	.3	.03	.8	.095	2.41
.005	.13	.013	.33	.036	.91	.210	5.33
.008	.20	.015	.38	.0500	1.270	.328	8.33
.010	.25	.017	.43	.090	2.29		

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only and are based upon 1.00 inch = 25.4 mm.
3. Radius optional on .015 ± .005 x 15° ± 5° chamfer.
4. Unless otherwise specified, tolerances are ± .005 inch (.13 mm) on three place decimals, ± .01 inch (.3 mm) on two place decimals and ± 2° on angles.

FIGURE 3. Bushing, insulator, female – Continued.



Inches	mm	Inches	mm
.00005	.0013	.025	.64
.0001	.003	.030	.76
.0003	.008	.040	1.02
.010	.25		
.020	.51		

NOTES:

1. Dimensions are in inches
2. Metric equivalents are given for information only and are based upon 1.00 inch = 25.4 mm.
3. Dimensions on this figure are for locating areas of localized finish only.

FIGURE 4. Localized finish (optional).

REQUIREMENTS:

Dimensions and configurations: See table I and figures 1, 2, 3 and 4.

Material:

Contacts: Contacts shall be beryllium copper in accordance with ASTM B194, alloy UNS No. C17200, minimum hardness of 310HK.

Exposed base material: Exposed base material is permitted in noncritical breakoff or plating carrier areas of the connector parts providing all performance requirements are maintained with no degradation of critical areas.

Bushing: Bushing shall be polyamide (nylon) per L-P-410 or ASTM D4066, group I (see figure 3).

Insulator bushing color: The insulator bushing color shall be the natural color of the base material.

Standard contact plating: Standard contact plating shall be in accordance with MIL-C-28754.

Localized contact finish: Contacts may be supplied with a localized finish. Contacts supplied with localized finish shall meet the requirements of MIL-C-28754 and this slash sheet. Contacts supplied with a localized finish shall conform to figures 2 and 4.

Gold finish: Gold shall be in accordance with MIL-DTL-45204, type II, grade C, class 1, and to a thickness of 50 micro-inches minimum. Area of gold finish shall be as specified on figure 4.

Nickel finish: Nickel finish shall be in accordance with SAE-AMS-QQ-N-290, class 1, and to a thickness of 50 microinches minimum over the entire contact surface (see figure 4).

Performance:

Low level (dry circuit): Voltage drop shall not exceed 20 millivolts. Wire size shall be 26 AWG.

Contact resistance: Voltage drop shall not exceed 20 millivolts.

Current rating: 3 amperes.

Voltage rating: 300 volts, ac (rms) at sea level.

Temperature rating: -55°C to +105°C.

Durability: Voltage drop shall not exceed 20 millivolts.

Part or Identifying Number (PIN) M28754/34- (dash number from table I).

TABLE I. Dash numbers and dimensions.

Dash No	Overall length "A" ± 0.010	Wrappost length "B" (Ref)
01	.513	.175
02	.588	.250
03	.688	.350
04	.838	.500
05	.963	.625
06	1.088	.750

Marking: In accordance with MIL-C-28754.

Shipping: Bulk shipment shall be in unassembled condition.

First article testing: Perform the applicable tests as specified in MIL-C-28754 and the appendix thereto.

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 previous issue.

Referenced documents. In addition to MIL-C-28754, this document references the following:

MIL-DTL-45204
ASTM B194
ASTM D4066
L-P-410
SAE-AMS-QQ-N-290

CONCLUDING MATERIAL

Custodians:
Army – CR
Navy – AS
Air Force – 85
DLA - CC

Preparing activity:
DLA - CC

(Project 5935-2015-123)

Review activities:
Army – AR, MI
Navy – MC, YD
Air Force – 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.dla.mil/.