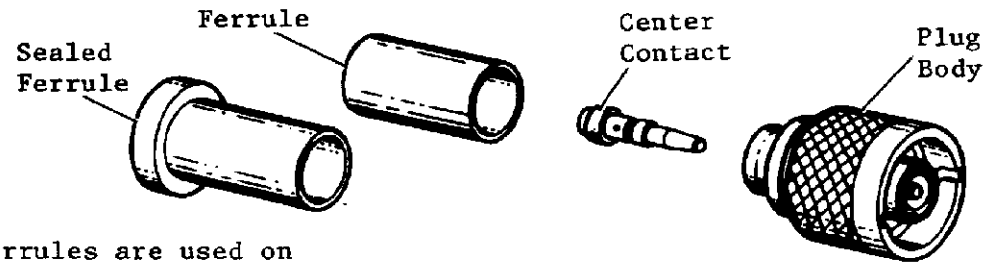
1. INTRODUCTION

This specification covers application requirements for AMP Series C Coaxial Connectors. They are available with silver and tarnish resistant plating for standard and weatherproof applications. There are straight and right-angle plug connectors for free-hanging applications and jacks for free-hanging, bulkhead-mount, and panel-mount applications. See Figure 1 for product features and nomenclature.

NOTE Dimensions on this document are in inches unless otherwise specified. Dimensional tolerances are ±.005 and angular tolerances are ±3° unless otherwise specified. Metric equivalents (mm) can be calculated by multiplying given dimension by 25.4.



NOTE: Sealed ferrules are used on weatherproof connectors.

Fig. 1 Product Features

2. REFERENCE MATERIALS

2.1. Product Numbers and Product Codes

Product Part Number 225013 and Product Code 3319 are representative of the AMP Series C Coaxial Connectors. Use of these numbers will identify the product line and expedite your inquiries through an AMP service network established to help you obtain product and tooling information. Such information can be obtained through a local AMP Representative (Field Sales Engineer, Field Applications Engineer, etc) or, after purchase, by calling the CUSTOMER HOTLINE at the top of this page.

2.2. Customer Drawing

An AMP Customer Drawing is available for each part number assigned to this product line. In the event of a variance between this specification and the customer drawing, the customer drawing information will take precedence.

2.3. Instructional Material

AMP Instruction Sheets IS 2331 and IS 2336 provide crimping instructions for the hand tools designed for these connectors. They provide the dies closure measurements for the tools, and this specification provides the acceptable crimp height range for the connectors. For information on measuring applied crimp force, refer to IS 7424.

2.4. Specifications

AMP Product Specification 108-12005 provides performance tests for these connectors.

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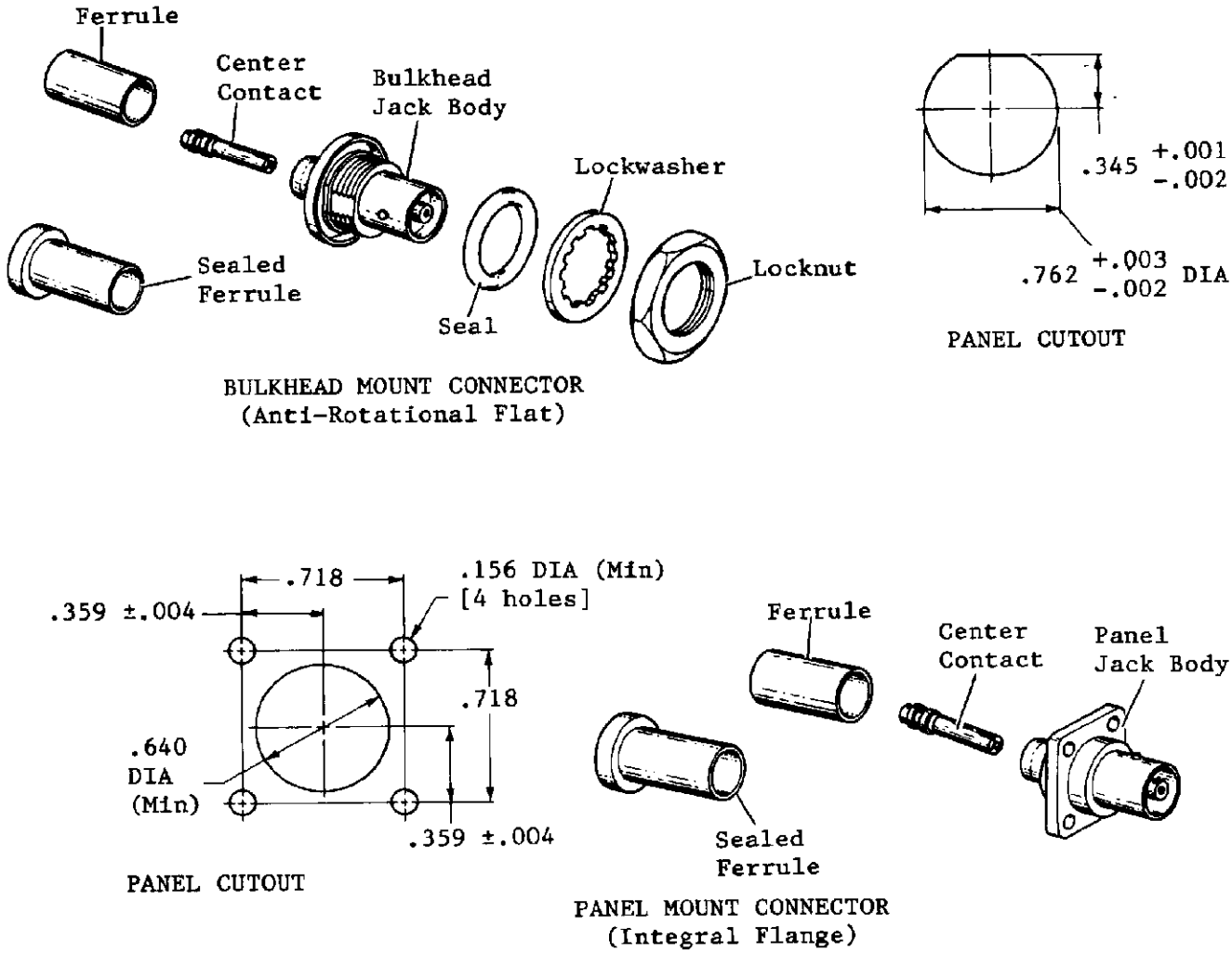


Fig. 2 Mountable Connector Components and Hole Cutout

3. REQUIREMENTS

There are free-hanging, bulkhead-mount, and panel-mount connectors. Each is available in various sizes to accommodate various cable sizes.

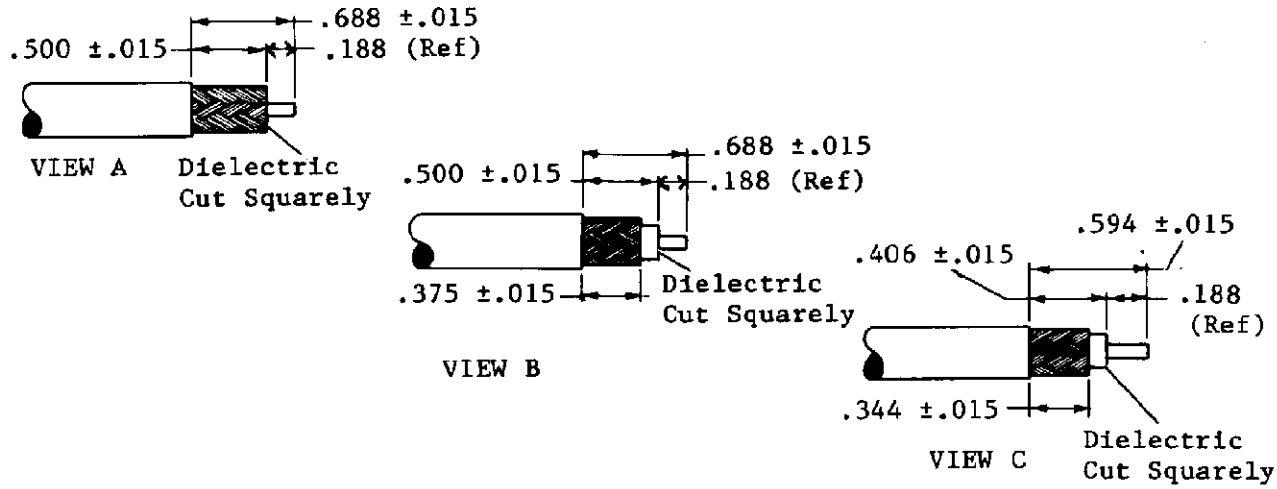
Each connector will require two crimps. The first one will be concealed after the second one is made. To ensure proper application, a visual and mechanical examination should be made immediately after each crimp is applied.

3.1. Mounting Hole Cutout

The bulkhead and panel mount connectors are designed for mounting in a fixed position. The bulkhead connectors have an anti-rotational flat surface to keep the connector in position after installation. The panel connectors have an integral mounting flange which works well with threaded and non-threaded panel holes. The mounting hole cutout for each type of connector is provided in Figure 2.

3.2. Cable Preparation and Crimp Height Dimensions

Refer to Figure 3 for the allowable bend radius, cable strip dimensions, crimp heights, crimping tools, and instruction sheets (IS) for terminating the connectors.



RG/U CABLE		CRIMP HEIGHT DIMENSIONS				CRIMPING TOOL	
DESCRIPTION	BEND RADIUS (Min)	STRIP DIM	CENTER CONT	FERRULE BRAID SUPPORT	FERRULE CABLE JACKET	PART NUMBER	INSTR SHEET
8, 8A, 213	Ten Times the Diameter of the Cable	View B	.067-.077	.409-.419	.376-.386	220015-12	2331
9, 9A, 9B, 213		View A	.067-.077	.409-.419	.376-.386	220015-1	
165		View B	.067-.077	.409-.419	.376-.386	220015-1	
225		View B	.067-.077	.409-.419	.376-.386	220015-1	
11, 11A, 144		View B	.067-.077	.409-.419	.376-.386	220015-1	
393		View A	.067-.077	.409-.419	.376-.386	220015-1	
216		View A	.067-.077	.409-.419	.376-.386	220015-1	
MICRODOT 205 -4172 & -4208		View B	.067-.077	.354-.364	.321-.331	220015-3	
58A, 58C		View C	.075-.081	.216-.224	.181-.193	220045-2	2336
55A, 223		View C	.075-.081	.216-.224	.181-.193	220045-2	
303		View C	.075-.081	.216-.224	.181-.193	220045-2	
142		View B	.075-.081	.216-.224	.181-.193	220045-2	

Fig. 3 Cable Preparation and Crimp Height (end)

3.3 Special Handling and Assembly Procedures

1. The ferrule should be placed on the cable before the cable is stripped to help prevent deformation of the cable shield.

2. Caution must be observed when stripping the cable to prevent cutting or nicking of the cable shield strands and center conductor.

3. The center contact must be crimped to the center conductor with the proper hand tool which must produce the crimp height specified in Figure 3.

4. Crimp height inspection and visual examination of the center contact crimp must be completed before the center contact is inserted into the connector body.

5. The center contact must be inserted into the connector body until bottomed, then a light pull made on the cable to be sure the contact is secure.

6. The cable shield must be evenly spaced around the support sleeve and the ends butted on the shoulder of the connector body.

7. The ferrule must be slid over the cable and butted against the shoulder of the connector body without any shield strands showing and then crimped in place with the proper tool to the dimensions provided. See Figure 3.

8. A bulkhead mounted connector must be inserted through the sealing ring and into the panel cutout, then secured to the panel with a lockwasher and nut.

9. A panel mounted connector must be positioned on the panel cutout and secured with the type of hardware that you select for the application (threaded panel screws, screws and nuts, rivets, etc).

4. TOOLING

4.1. Crimping Tools

The only tools recommended for terminating these connectors are those that are designed specifically for the connectors. See chart in Figure 3.

4.2. Crimp Height Measurement

The crimp height can be checked with any good quality micrometer that measures to the third digit beyond the decimal point. The measurement must be made at the most compressed area of the crimp as indicated in Figure 4. Refer to the chart in Figure 3 for the proper cable and crimp height combination.

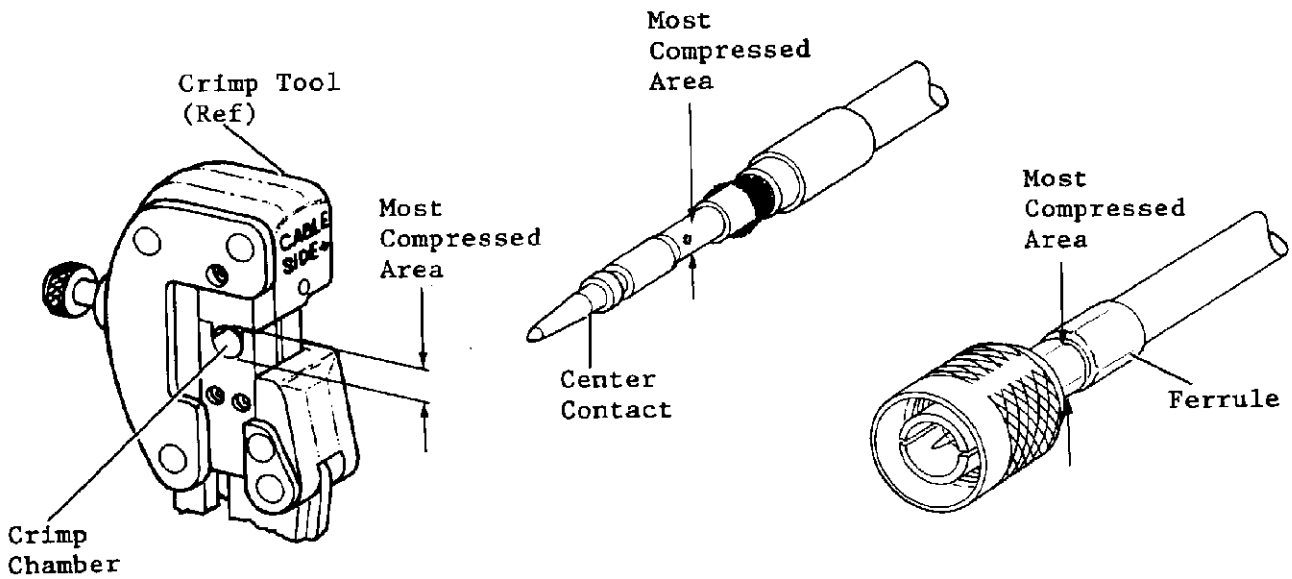


Fig. 4 Crimp Height Measurement

5. VISUAL AID (Figure 5)

Check termination to be sure:

1. Dielectric is butted against center contact (this check must be made before the center contact is inserted into the connector body).

2. Ferrule is seated on shoulder of connector body.

3. No shield strands of the cable are visible at either end of the ferrule.

4. Cable is aligned with the connector and not deformed (bent, flattened, twisted, etc).

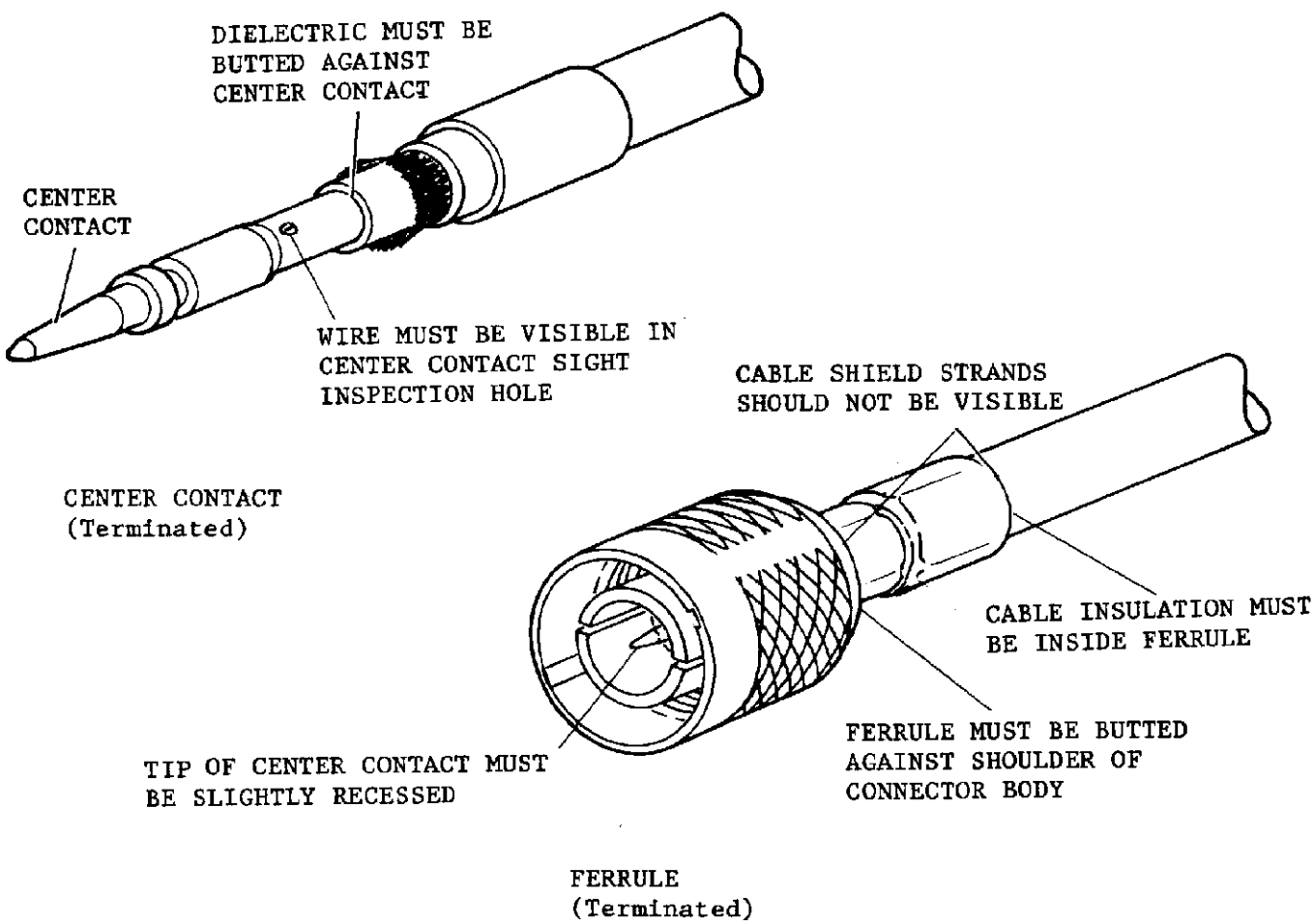


Fig. 5 Visual Aid